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No. SSWS-AR-0011 Rev. New

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Orig, Date 1/30/99

Rev. Date

TITLE: Building T654 Supplemental Final Radiological Survey Report

APPROVALS

Originator	Farley C. Dahl	
	Phil D. Rutherford 3/2/99	
	Sam E. Reeder 3/3/99	
	Majelle E. Lee	

REV LTR	REVISION	APPROVAL/DATE

FORM 735-A-6 REV. 6-97

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1. INTRODUCTION

This document provides the results of the Supplemental Final Radiological Survey SSWA-AR-0009 (Reference 1) of the decommissioned Interim Storage Facility (ISF), Building 4654. A recent review by the DOE Independent Verification Contractor (IVC) (Reference 2) judged that the documentation of the original survey (Reference 6) was inadequate by today's standards. In addition, the effectiveness of the qualitative gamma exposure rate survey was compromised by skyshine from radioactive material at the nearby Radioactive Material Handling Facility (RMHF), then the Radioactive Material Disposal Facility (RMDF). Further, at the time of the IVC review, the subsurface soil was not accessible for sampling by ORISE.

The scope of this survey included a 100% direct qualitative scan for gamma exposure rate followed by surface soil sampling at random locations based on a uniform grid, or as indicated by the qualitative survey. Samples of soil taken by the IVC throughout the depth of the excavated storage facility determined the condition of subsurface soil. Samples taken from the surface, in accordance with Reference 1, determined the condition of the surface soil with a potential for exposure.

This report ensures that the ISF met current DOE and State of California approved criteria for release of the facility for unrestricted use by applying the current sitewide release limits for soil from (Reference 4). The sampling-inspection-by-variables method was applied to the data analyzed in this survey report. The in-house computer code "CumPlot" was used for data analysis and presentation of survey report results. Use of the results from "CumPlot" and the interpretation of the cumulative probability distribution plots have been documented in other final survey reports and is not included in this report. (See References 5 and 8 for further information.)

1.1 Facility History

The ISF consisted of a concrete structure in the ground that anchored the tops of eight storage tubes. The tubes extended into large holes drilled into the bedrock, and were embedded with drilling mud. In addition, a paved pad was adjacent to the in-ground structure and provided a fenced storage area. The decommissioning (Reference 6) was done by removal of contamination in soil and on the concrete and complete removal of the tubes and concrete.

Early surveys in 1985 showed contamination that was removed. At that time, Rocketdyne was using a gross beta limit of 100 pCi/g for soil, which was based on the existing technology that the natural activity amounted to 25 pCi/g. At this background level, we could accommodate 25-pCi/g Cs-137, 25 pCi/g Sr-90 and 25 pCi/g Y-90. All these activities are detectable by a thin-window gas-flow proportional counter. The limits were similar to the total of our current RESRAD limits (Reference 4) of 9.2 pCi/g Cs-137, 36.0 pCi/g Sr-90 and 36.0 pCi/g Y-90. During the initial work, only those soils that were above 100 pCi/g gross beta were marked for removal. However, the final gamma-spec on samples in 1985 did not show anything above 2.0 pCi/g.

The original decommissioning was documented in Reference 6 and consisted of locating and removing surface contamination from the paving and the concrete structure of the below-grade storage cells, and complete removal of the below-grade structure. The excavation was back-filled with clean concrete rubble. The excavation was then filled with the local soil that had been previously excavated, and the surface was graded to a natural form. The only remaining potentially contaminated material consists of the surface and subsurface soil.

2. SUMMARY AND CONCLUSIONS

To confirm the satisfactory radiological remediation of this area met current limits, a sampling and analysis plan was developed (Reference 1). Rocketdyne personnel performed a 100% direct qualitative scan for gamma exposure rate and collected 93 surface soil samples for analysis according to this plan. Additionally, after gamma spectroscopy analyses were completed, twelve samples with the highest Cs-137 concentrations were analyzed by an outside laboratory for Sr-90. Figure 1 maps the location of the Interim Storage Facility with respect to the Boeing Rocketdyne Santa Susana Field Laboratory. Figure 2 shows the layout of the Interim Storage Facility and its subdivision into grids to provide a basis for the sampling. (Note: Figures and Tables follow the text of this report.)

The gamma spectrometry of the surface soil showed low concentrations of Cs-137, the primary radioactive contaminant at the Interim Storage Facility, and normal amounts of natural K-40, the natural thorium and natural uranium decay chains. The Cs-137 concentrations are, similar to, though in some instances somewhat greater than local background surface soil concentrations due to global fallout from nuclear weapon testing. The average Cs-137 concentration was 0.47 pCi/g with the two highest samples at 4 and 7 pCi/g less than the Sitewide Release Criteria limit from Reference 4 of 9.2 pCi/g. One surface soil sample contained Co-60 at 0.023 pCi/g less than the Sitewide Release Criteria limit from Reference 4 of 1.94 pCi/g. Further analyses of the Rocketdyne surface soil results demonstrate that the thorium and uranium activities are a natural occurrence in all samples. Other isotopes, including Be-7, Na-22, Mn-54, Sb-125, Cs-134, Cs-136, Ba-133, Eu-152, Eu-154, Eu-155, Ir-192, Tl-210, Bi-211, Pb-211, Rn-219, Rn-220, Ra-223, Ac-227, Th-227, Th-228, Th-230, Th-231, Th-232, Pa-231 and Am-241, were analyzed for as well and all were less than the MDA and, where applicable, less than the Sitewide Release Criteria from Reference 4. The radiochemistry of the surface soil by Teledyne-Brown showed elevated Sr-90 concentrations ranging from less than 0.40 to 1.3 pCi/g slightly above background but all much less than the Sitewide Release Criteria from Reference 4 of 36.0 pCi/gram. The results are in Table 1, 2, and 3 and more specifically explained in the Results section.

In 1997, following the surface soil sampling, subsurface soil and rock samples were independently taken and were analyzed by Oak Ridge Institute for Science and Education (ORISE), and the results were reported and documented in Reference 7. Radionuclide concentrations in the ORISE subsurface sampling ranged from less than 0.61 to 1.25 pCi/g for Ra-226, less than 0.67 to 1.94 pCi/g for Th-232, less than the MDC (0.84 pCi/g) for U-235, and less than 2.35 pCi/g for U-238. All activation and fission products were less than the Maximum Detectable Concentrations (MDC) of 1.50 pCi/g for Cr-51. The radiochemistry of the subsurface soil taken by ORISE showed less than the Minimum Detectable Activity (MDA) for Sr-90 and normal amounts of natural K-40, the natural thorium and natural uranium decay chains. Sr-90 analyses were all less than the MDC ranging from 0.39 to 0.55 pCi/g. Cs-137 concentrations

ranged from 0.22 to 0.43 pCi/g, which is consistent with global nuclear fallout concentrations (Reference 8). All results and MDCs were well below acceptable limits for radioactive contamination in soil (Reference 4).

No samples indicated the presence of radioactive contaminants above the Sitewide Release Criteria in Reference 4, including an analysis on the sum-of the-fractions rule. All results were below acceptable limits for radioactive contamination in soil (Reference 4). The results of this sampling and analysis program confirm that the area is acceptable for release for use without radiological restriction.

3. SAMPLING

For providing a uniform basis for sampling the Interim Storage Facility area, two areas were established, relating to the history of the facility. These areas were the affected and unaffected areas. They were divided into 3-meter square grids and further subdivided into 1-meter grids. Figures 2, 3 and 4 and Table 4 show the actual locations. Sample locations were selected within the grids by use of random numbers.

Surface soil samples were collected by hand, with a trowel, providing somewhat more than 0.5 kg of soil for each sample. Surface soil samples were placed in marinelli beakers and a Chain-of-Custody form filled out. Samples were then transported to the Boeing Rocketdyne Gamma Spectroscopy Laboratory. Subsurface samples were collected at 8 foot intervals to a depth of about 32 feet below the surface by use of a drilling truck. Samples were the transported to the ORISE laboratory. Sample locations were identified, relative to the grid shown in Figure 2.

4. ANALYSIS

The subsurface soil samples were analyzed at ORISE in Oak Ridge, Tennessee, under contract to DOE/OAK. The gamma spectrometry used a high-purity germanium detector with a computer based multichannel analyzer. The standard Canberra software for interpretation of photopeaks was used. The uncertainties reported with the results are determined by computer processing and are specified at the 2-sigma level.

The surface soil samples analyses by gamma spectrometry were analyzed at Boeing Rocketdyne under contract to DOE/OAK. The gamma spectrometry used a thin-window high-purity germanium detector with a computer based multichannel analyzer. The standard Canberra software for interpretation of photopeaks was used. The uncertainties reported with the results are determined by computer processing and are specified at the 2-sigma level.

The twelve highest Cs-137 concentration surface soil samples were analyzed by Teledyne-Brown for Sr-90. Radiochemistry was done to quantify Sr-90. Chemical separation provides a strontium precipitate, beta counting serves as the determination of the activity. The uncertainties reported with the results are determined by computer processing and are specified at the 2-sigma level.

5. RESULTS

The gamma spectrometry of the surface soil showed low concentrations of Cs-137, the primary radioactive contaminant at the Interim Storage Facility, ranging from less 0.02 pCi/g to 6.99 pCi/g, below the limit of 9.2 pCi/g. One surface soil sample contained Co-60, a potential contaminant, at 0.023 pCi/g, less than the limit from Reference 4 of 1.94 pCi/g. The radiochemistry from the twelve highest Cs-137 concentration samples of the surface soil for Sr-90 ranged from less than 0.40 pCi/g to 1.3 pCi/g, less than the limit from Reference 4 of 36.0 pCi/g Natural K-40 ranged from 17.10 to 21.66 pCi/g. The natural thorium and natural uranium decay chains summary comparison in Table 1 demonstrates that the thorium and uranium activities are a natural occurrence in all samples averaging from 0.64 to 2.22 pCi/g for the thorium chain and from 0.49 to 2.88 pCi/g for the uranium chain. Other isotopes, including Be-7, Na-22, Mn-54, Sb-125, Cs-134, Cs-136, Ba-133, Eu-152, Eu-154, Eu-155, Ir-192, Tl-210, Bi-211, Pb-211, Rn-219, Rn-220, Ra-223, Ac-227, Th-227, Th-228, Th-230, Th-231, Th-232, Pa-231 and Am-241, were analyzed for as well and all were less than the MDA and, where used in Reference 4, less than the Sitewide Release Criteria limit.

The results and sample data of the surface soil analyses by gamma spectroscopy are listed in Tables 1, 2, 3,and 4. All ninety-three surface soil samples are included here. These tables provide the sample location code number and the activity concentration and error, in pCi/g. Table 1 lists a summary of those radionuclides detected in the samples by gamma spectrometry. Table 2 lists the individual results. Entries in the error columns of "<MDA" indicate that the Minimum Detectable Activity for that result has been entered. Table 3 lists the Teledyne-Brown Sr-90 radiochemistry results for the twelve highest Cs-137 sample analyses that were performed. Table 4 lists other quality assurance information associated with obtaining the surface soil samples. (See Figure 4 for an explanation of the location data.)

6. INTERPRETATION

Individual results from the analysis of soil and rock for Cs-137 and Sr-90 are presented as cumulative probability plots in Figures 6 and 7. Figure 5, the results for K-40, is shown for a comparison to normal levels and provides a means to demonstrate the soil is homogeneous. In these plots, measured values are shown with an error bar associated with the data symbol. Non-detected results are plotted alongside detected results. In a cumulative probability plot, data with a normal (or Gaussian) distribution fall along a straight line. The plot shows, as a diagonal line, the theoretical Gaussian distribution calculated from the arithmetic mean and standard deviation of the dataset.

Most of the radionuclides detected show a distribution that is close to Gaussian. The distribution for Cs-137 in soil (Figure 6) shows several values that are somewhat higher than expected and outside the range of environmental fallout activity in surface soil. All results are below the SSFL site limit for Cs-137 in soil of 9.2 pCi/g, as determined by a pathway analysis using the DOE code RESRAD (Reference 4).

The results for Sr-90 in soil (Figure 7) also show some elevated values. Of the 12 surface soil sample analyses performed, five were reported at levels that were below the MDA (see Table 3). Seven surface soil samples, ranging from 0.40 to 1.30 pCi/g, are above MDA for this analysis. All results are well below the proposed SSFL site limit for Sr-90 in soil of 36 pCi/g, as determined by a pathways analysis using the DOE code RESRAD (Reference 4).

A summary of the other gamma spectroscopy results for surface soil samples are shown in Tables 1 and 2. Analysis of the data reveals normal amounts of natural K-40 and the natural thorium and natural uranium decay chains.

7. DOCUMENTATION

Backup documentation for this sampling and analysis project is stored in the Interim Storage Facility (Building 4654) decommissioning file.

8. REFERENCES

1. "Building T654 Supplemental Final Radiological Survey Plan", SSWA-AR-0009, R. J. Tuttle, 12/04/96.

2. "Verification Survey for the Interim Storage Facility; Buildings T013, T019, T024, T030; An area Northwest of Buildings T012, T013, T019, T059; and a Storage Yard West of Buildings T626 and T038; Santa Susana Field Laboratory, Rockwell International, Ventura County, California", Oak Ridge Institute for Science and Education (ORISE), Oak Ridge, TN, 9/6/95.

3. "Health and Safety Analysis Report", J. H. Wallace, 7/10/84, ISF- Scabbled Concrete Trench Top, T654 Decommissioning File.

4. "Approved Sitewide Release Criteria for Remediation of Facilities at the SSFL", Rockwell Document N001SRR140131, February 1999.

5. "Final Radiological Survey Report of Building 023", Rockwell-Rocketdyne Document 023-ZR-0001, F. C. Dahl, 3/1/94, pages 26 through 30.

6. "Interim Storage Facility Decommissioning Final Report", Rockwell-Rocketdyne Document ESG-DOE-13507, 3/15/85.

7. ORISE 97-1900, "Verification Survey for the Interim Storage Facility (T654), Santa Susana Field Laboratory, Rockwell International, Ventura County, California", Oak Ridge Institute for Science and Education (ORISE), Oak Ridge, TN, November, 1997.

8. "Area IV Radiological Characterization Survey Final Report", Volume 1, A4CM-ZR-0011, P. D. Rutherford, August 15, 1996.

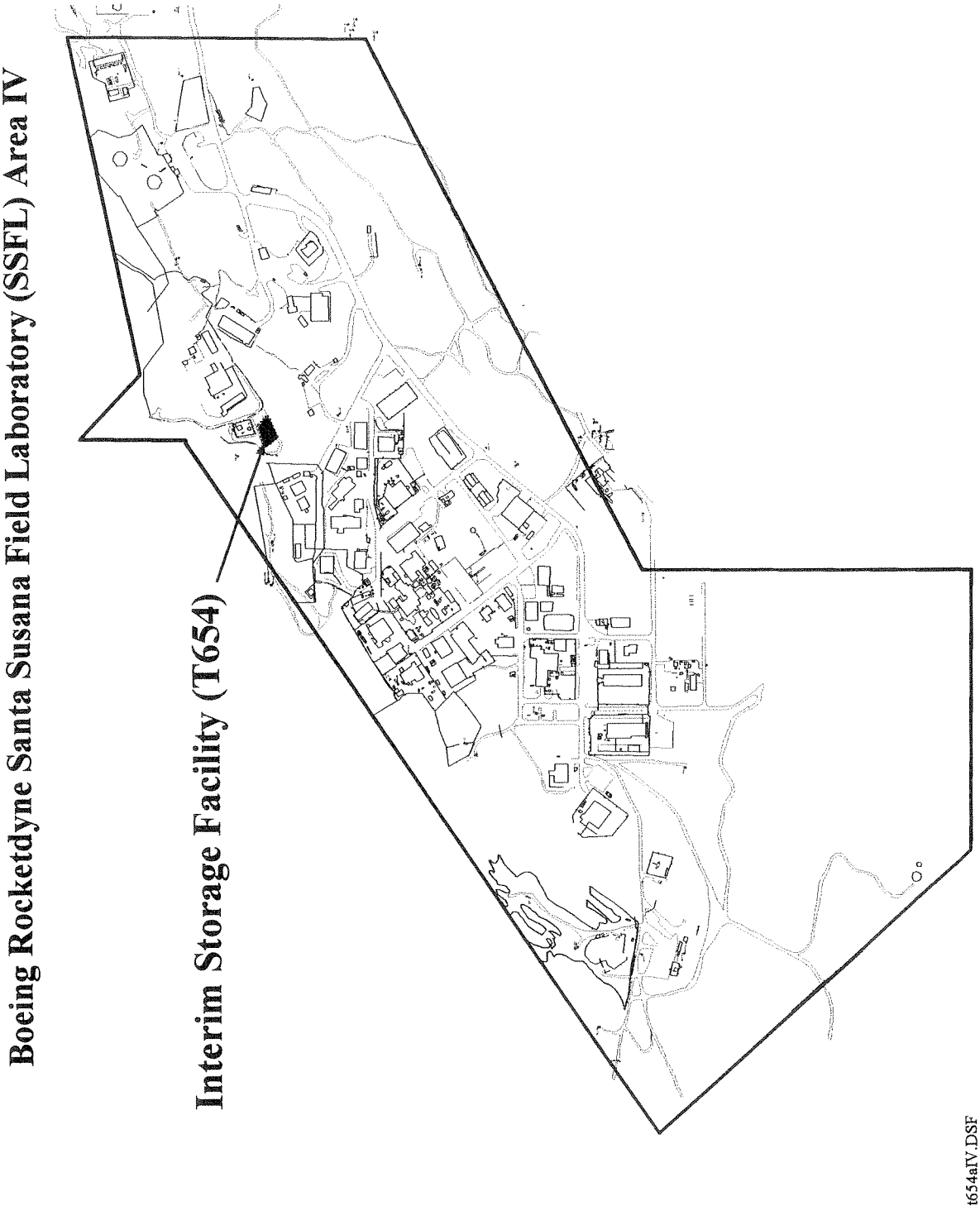

Figure 1. Location of the Interim Storage Facility.

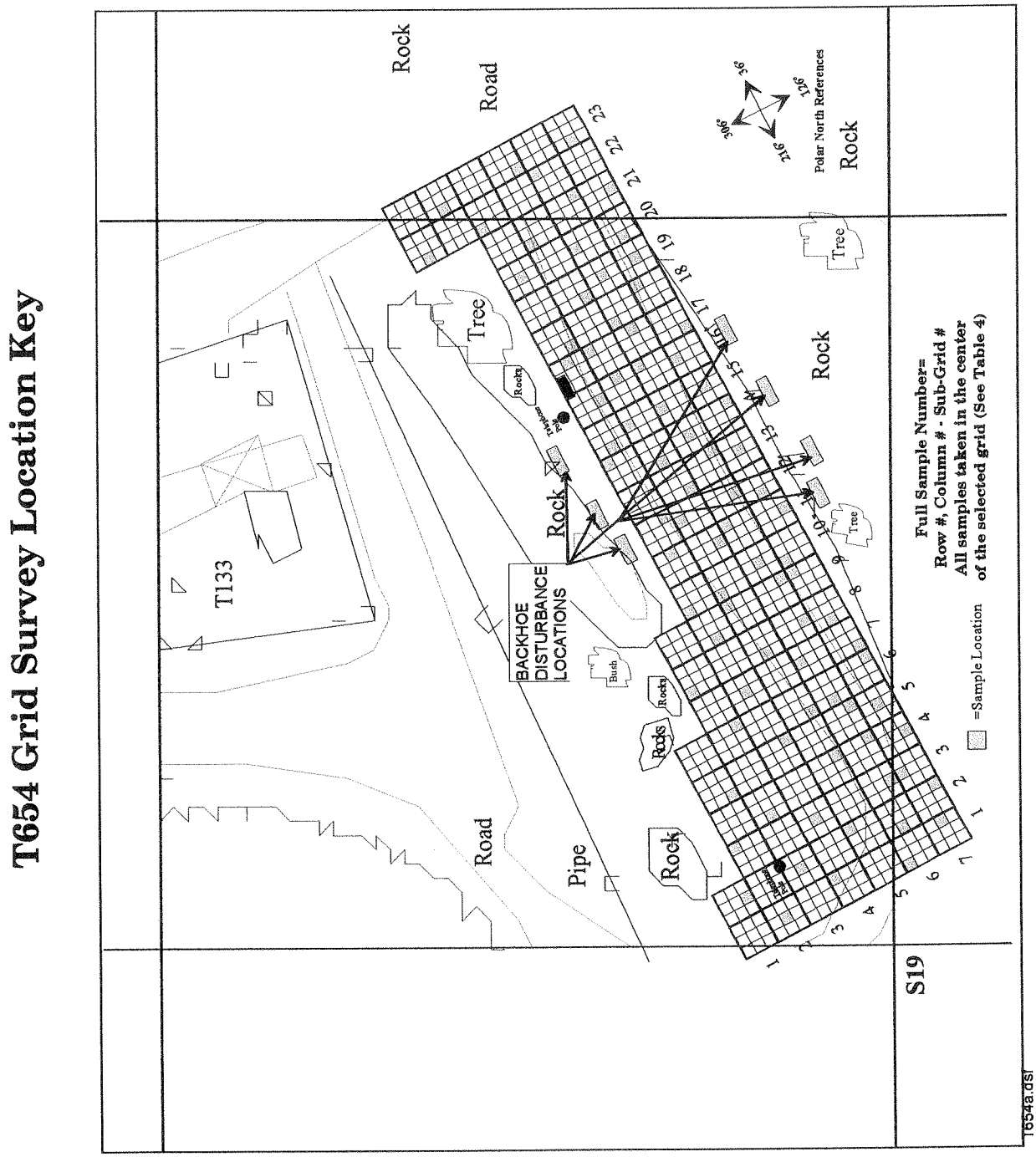

Figure 2. Locations of surface soil samples.

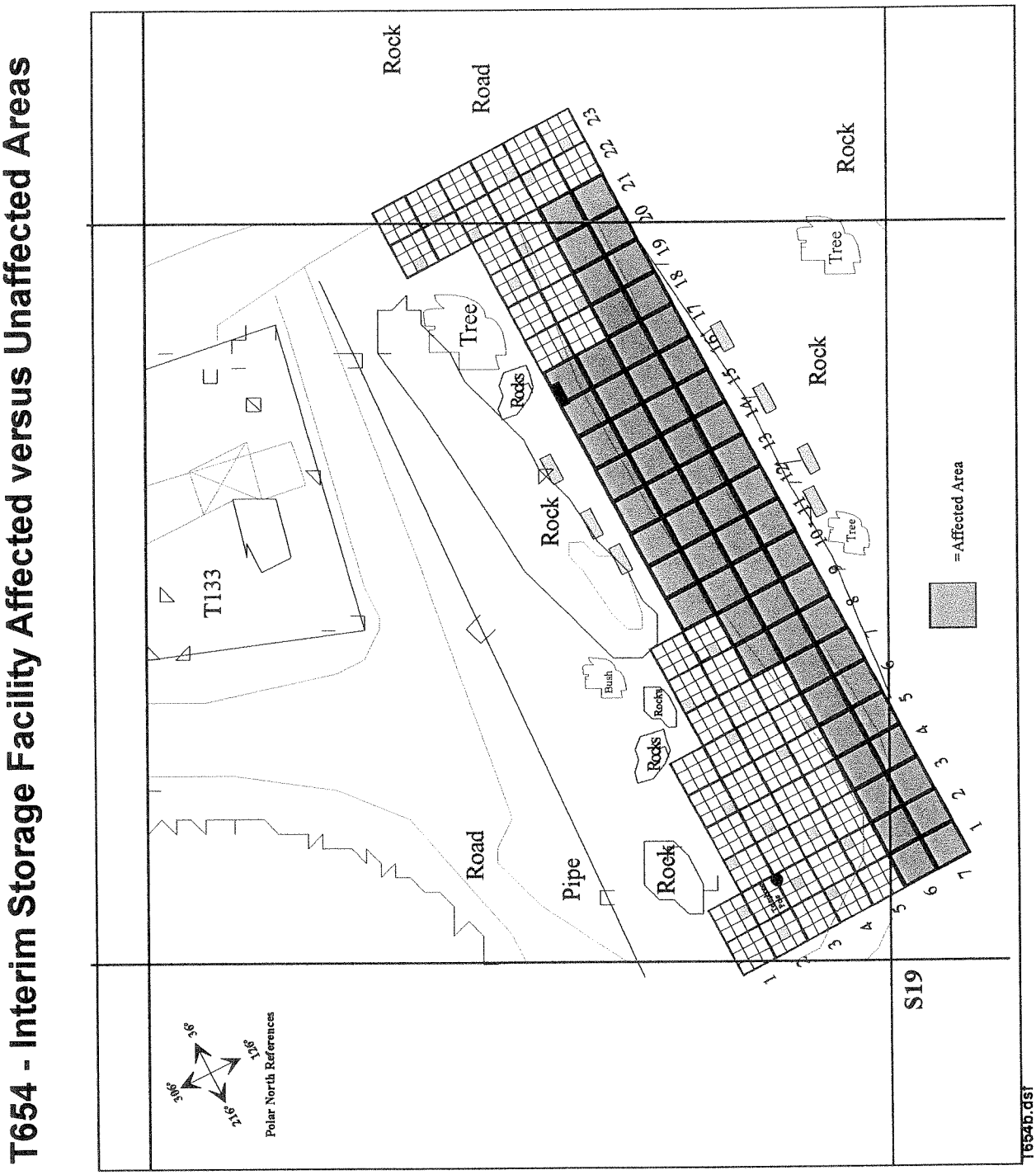

Figure 3. Locations of affected and unaffected areas.

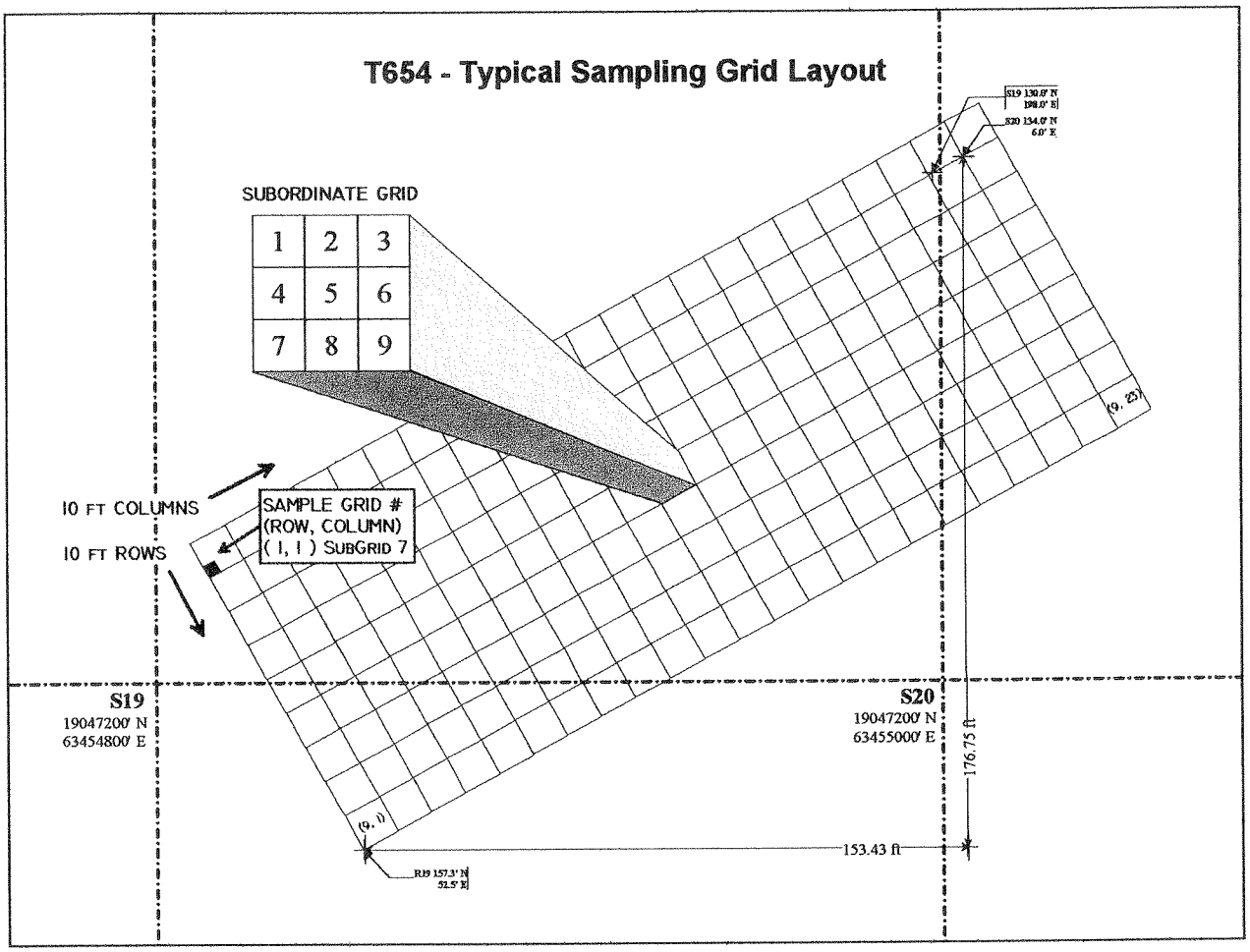

Figure 4. Typical Sampling Grid Naming Convention.

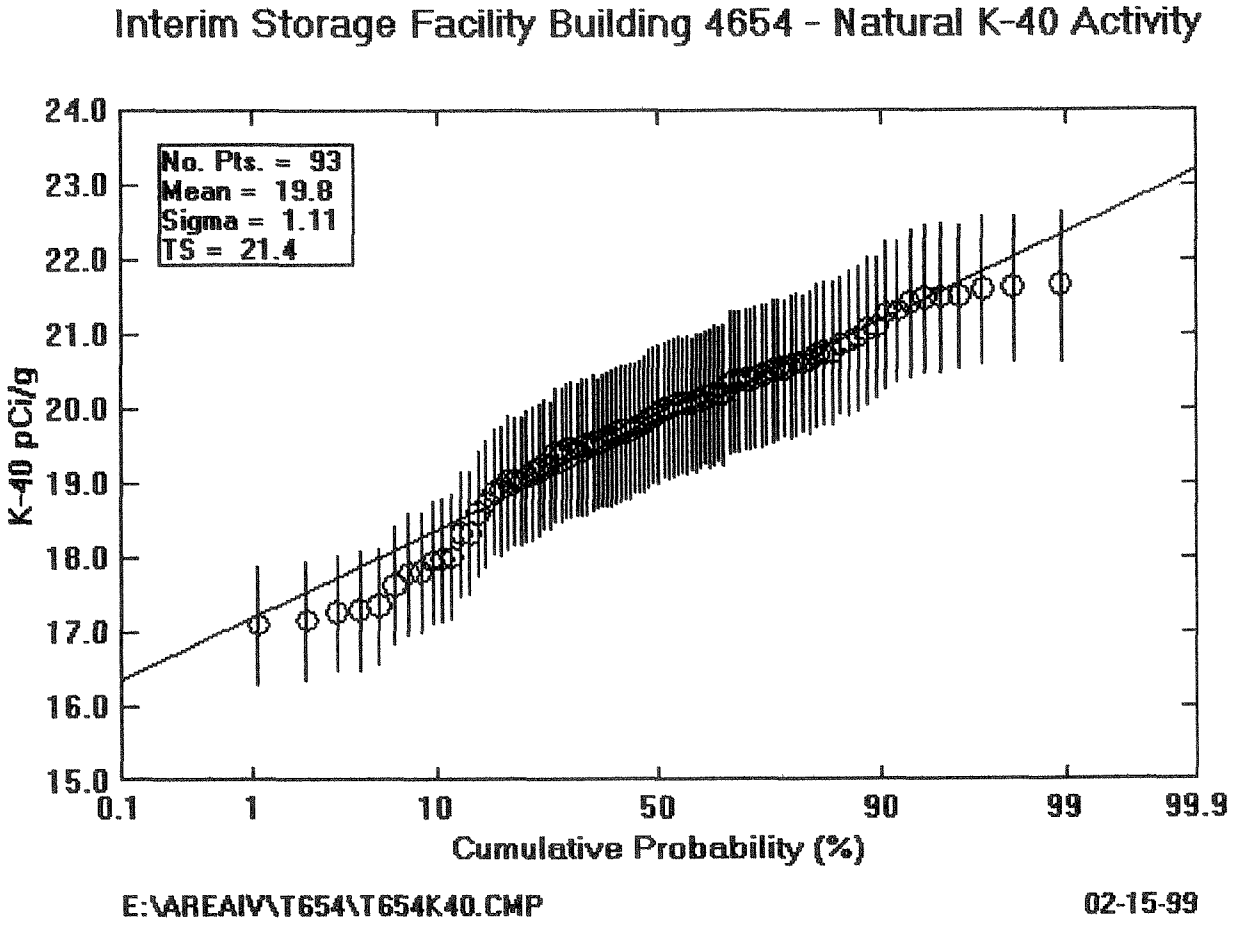

Figure 5. Distribution of K-40 in Soil and Rock at the Interim Storage Facility.

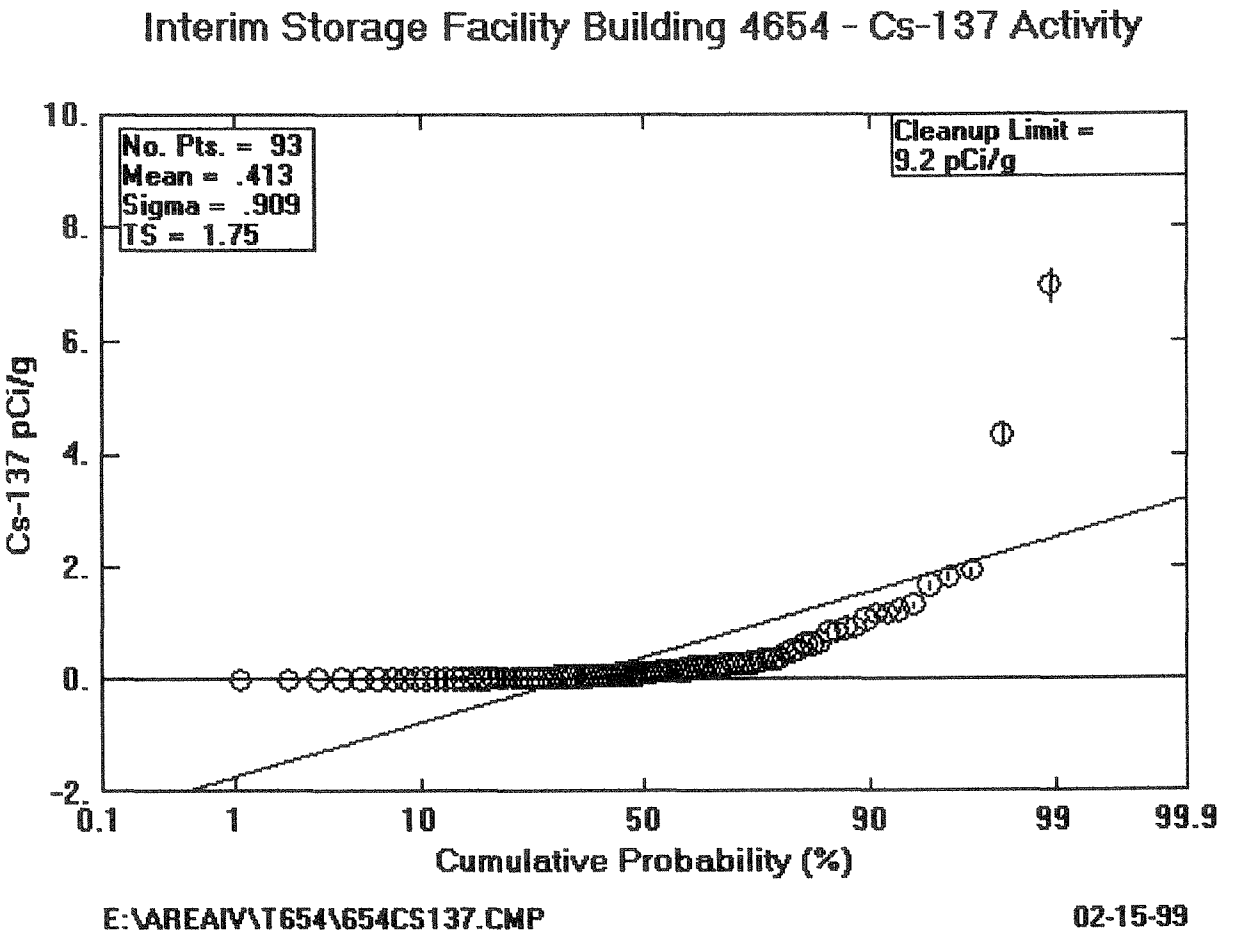

Figure 6. Distribution of Cs-137 in Soil and Rock at the Interim Storage Facility.

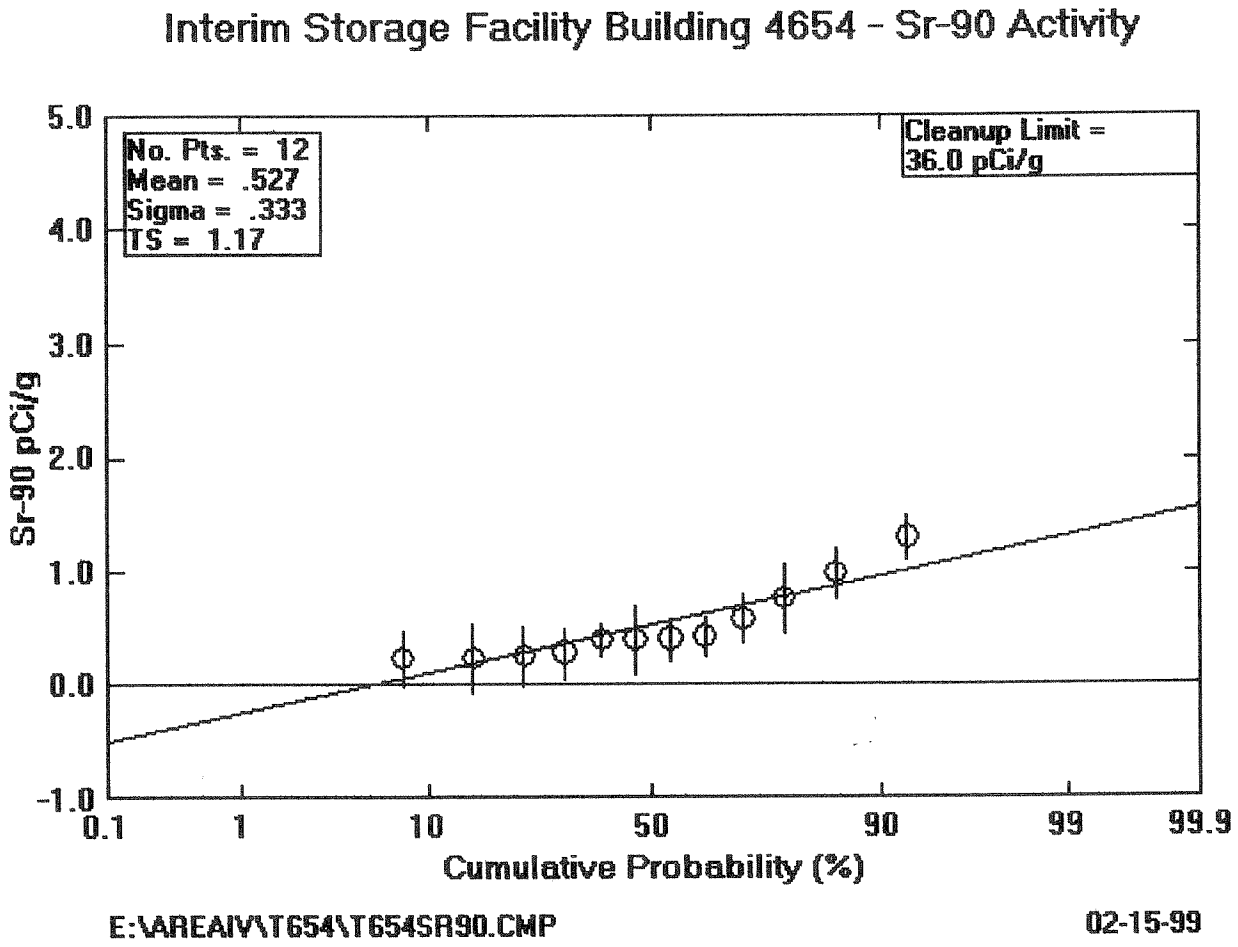

Figure 7. Distribution of Sr-90 in Soil and Rock at the Interim Storage Facility.

Table 1. Summary Surface Soil Gamma Spectroscopy Results*

					Natural Thorium Chain Gamma Emitters				
		K-40 pCi/g	Cs-137 pCi/g	Co-60 pCi/g	Tl-208 pCi/g	Pb-212 pCi/g	Bi-212 pCi/g	Ra-224 pCi/g	Ac-228 pCi/g
	Maximum	21.66	6.99	0.023	0.54	1.77	2.22	1.74	1.37
Detect	Average	19.78	0.47	0.023	0.37	1.24	0.97	1.22	1.03
	Minimum	17.10	0.01	0.023	0.23	0.79	0.52	0.69	0.66
	Detects	93	82	1	93	93	48	92	93
	Maximum		0.02	0.026			2.22	0.32	
MDA	Average		0.02	0.021			0.66	0.32	
	Minimum		0.01	0.016			0.09	0.32	
	NonDetect's	0	11	92	0	0	45	1	0

		Natural Uranium Decay Chain Gamma Emitters							
		Pb-210 pCi/g	Pb-214 pCi/g	Bi-214 pCi/g	Ra-226 pCi/g	Th-234 pCi/g	Pa-234m pCi/g	U-234 pCi/g	U-235 pCi/g
	Maximum	1.28	1.37	1.22	1.63	1.74	2.88	<MDA	0.08
Detect	Average	0.84	0.80	0.76	0.81	0.77	1.92	<MDA	0.04
	Minimum	0.49	0.37	0.35	0.30	0.24	1.40	<MDA	0.01
	Detects	59	93	93	90	93	13	0	93
	Maximum	0.87			0.88		3.12	25.91	
MDA	Average	0.72			0.54		2.56	19.29	
	Minimum	0.53			0.34		1.82	10.85	
	NonDetect's	34	0	0	3	0	80	93	0

* Other Isotopes at <MDA : (MDA's are typical)

Isotope	MDA value
Be-7	0.14 pCi/g
Na-22	0.03 pCi/g
Sb-125	0.05 pCi/g
Cs-134	0.02 pCi/g
Cs-136	0.02 pCi/g
Ba-133	0.02 pCi/g
Eu-152	0.04 pCi/g
Eu-154	0.03 pCi/g
Eu-155	0.07 pCi/g
Ir-192	0.02 pCi/g
Tl-210	0.02 pCi/g
Pb-211	0.05 pCi/g

Isotope	MDA value
Bi-211	0.30 pCi/g
Rn-219	0.18 pCi/g
Rn-220	14.7 pCi/g
Ra-223	0.10 pCi/g
Ac-227	63.5 pCi/g
Th-227	0.13 pCi/g
Th-228	5.2 pCi/g
Th-230	5.3 pCi/g
Th-231	0.35 pCi/g
Th-232	12.6 pCi/g
Pa-231	0.58 pCi/g
Am-241	0.07 pCi/g

Table 2. Building T654 Indivdual Surface Soil Sample Results

NOTE: BOLD VALUES INDICATE DETECTED AND NON-BOLD VALUES INDICATE MDA FOR THAT SAMPLE

Sample #	Date	Grid #	Sub-Grid #	Weight (grams)		K-40 pCi/g	Error pCi/g	Cs-137 pCi/g	Error pCi/g	Co-60 pCi/g	Error pCi/g
654-97-0001	9/22/97	1,2	8	712	1	**19.95**	**0.94**	**0.36**	**0.018**	0.020	MDA
654-97-0002	9/22/97	2,1	5	759	2	**19.26**	**0.86**	**0.39**	**0.019**	0.020	MDA
654-97-0003	9/22/97	2,3	3	715	3	**20.40**	**0.96**	**0.24**	**0.013**	0.023	MDA
654-97-0004	9/22/97	2,5	7	789	4	**20.07**	**0.91**	**0.13**	**0.006**	0.021	MDA
654-97-0005	9/22/97	2,22	4	755	5	**19.50**	**0.92**	0.02	MDA	0.022	MDA
654-97-0006	9/22/97	3,2	5	733	6	**19.58**	**0.89**	**1.07**	**0.048**	0.019	MDA
654-97-0007	9/22/97	3,4	4	650	7	**20.76**	**0.98**	**0.31**	**0.015**	0.023	MDA
654-97-0008	9/22/97	3,6	9	812	8	**19.26**	**0.88**	**0.12**	**0.008**	0.021	MDA
654-97-0009	9/22/97	3,8	1	629	9	**20.35**	**0.97**	**0.16**	**0.009**	0.024	MDA
654-97-0010	9/22/97	3,23	4	953	10	**19.70**	**0.91**	**0.01**	**0.003**	0.019	MDA
654-97-0011	9/22/97	4,1	3	697	11	**20.06**	**0.95**	**0.22**	**0.014**	0.022	MDA
654-97-0012	9/22/97	4,3	5	833	12	**19.39**	**0.91**	**0.62**	**0.029**	0.020	MDA
654-97-0013	9/22/97	4,5	9	694	13	**20.52**	**0.97**	**0.16**	**0.009**	0.022	MDA
654-97-0014	9/22/97	4,7	5	811	14	**20.03**	**0.94**	**0.25**	**0.013**	0.022	MDA
654-97-0015	9/22/97	4,9	4	805	15	**19.55**	**0.92**	**0.07**	**0.005**	0.021	MDA
654-97-0016	9/22/97	4,10	1	765	16	**20.76**	**0.97**	**1.17**	**0.052**	0.021	MDA
654-97-0017	9/22/97	4,11	6	810	17	**19.62**	**0.92**	**0.02**	**0.004**	0.023	MDA
654-97-0018	9/23/97	4,12	9	814	18	**20.08**	**0.89**	**0.29**	**0.014**	0.021	MDA
654-97-0019	9/23/97	4,13	2	809	19	**19.15**	**0.90**	0.02	MDA	0.021	MDA
654-97-0020	9/23/97	4,14	3	843	20	**19.47**	**0.91**	**0.09**	**0.006**	0.019	MDA
654-97-0021	9/23/97	4,15	4	890	21	**19.76**	**0.89**	**0.53**	**0.024**	0.017	MDA
654-97-0022	9/23/97	4,16	8	819	22	**19.46**	**0.91**	**0.30**	**0.015**	0.021	MDA
654-97-0023	9/23/97	4,17	6	788	23	**19.77**	**0.89**	**0.05**	**0.004**	0.022	MDA
654-97-0024	9/23/97	4,18	7	784	24	**20.65**	**0.97**	0.02	MDA	0.022	MDA
654-97-0025	9/23/97	4,20	5	939	25	**20.11**	**0.91**	0.02	MDA	0.022	MDA
654-97-0026	9/23/97	4,22	1	988	26	**18.75**	**0.87**	0.02	MDA	0.019	MDA
654-97-0027	9/23/97	5,2	3	824	27	**20.37**	**0.95**	**0.23**	**0.013**	0.022	MDA
654-97-0028	9/23/97	5,4	9	785	28	**20.20**	**0.91**	**0.91**	**0.040**	0.019	MDA
654-97-0029	9/23/97	5,6	7	809	29	**19.39**	**0.91**	**0.16**	**0.009**	0.020	MDA
654-97-0030	9/23/97	5,8	4	848	30	**19.88**	**0.93**	**0.10**	**0.007**	0.021	MDA
654-97-0031	9/23/97	5,9	3	769	31	**20.43**	**0.96**	**0.08**	**0.005**	0.023	MDA
654-97-0032	9/23/97	5,10	1	726	32	**21.28**	**1.00**	**0.49**	**0.023**	0.022	MDA
654-97-0033	9/23/97	5,11	8	803	33	**20.16**	**0.94**	**0.04**	**0.003**	0.021	MDA
654-97-0034	9/23/97	5,12	2	861	34	**19.93**	**0.93**	**0.05**	**0.004**	0.022	MDA
654-97-0035	9/23/97	5,13	7	885	35	**20.73**	**0.96**	**0.10**	**0.006**	0.019	MDA
654-97-0036	9/23/97	5,14	4	804	36	**19.51**	**0.92**	**0.16**	**0.009**	0.022	MDA
654-97-0037	9/23/97	5,15	2	821	37	**20.01**	**0.94**	**0.04**	**0.004**	0.020	MDA
654-97-0038	9/23/97	5,16	6	715	38	**20.89**	**0.98**	**0.07**	**0.006**	0.021	MDA
654-97-0039	9/23/97	5,17	3	891	39	**18.34**	**0.83**	**0.84**	**0.037**	0.018	MDA
654-97-0040	9/23/97	5,19	7	820	40	**19.61**	**0.92**	**0.10**	**0.006**	0.022	MDA
654-97-0042	9/23/97	5,23	7	904	42	**17.82**	**0.83**	**0.02**	**0.003**	0.018	MDA
654-97-0043	9/23/97	6,1	1	820	43	**19.81**	**0.93**	**0.84**	**0.038**	0.020	MDA
654-97-0044	9/23/97	6,2	4	756	44	**20.96**	**0.98**	**1.17**	**0.051**	0.023	MDA
654-97-0045	9/23/97	6,3	8	909	45	**17.95**	**0.84**	0.01	MDA	0.018	MDA
654-97-0046	9/23/97	6,4	9	993	46	**17.36**	**0.79**	0.02	MDA	0.016	MDA
				Maximum		**21.66**		**6.99**		**0.023**	
			Detect	**Average**		**19.78**		**0.47**		**0.023**	
				Minimum		**17.10**		**0.01**		**0.023**	
				Detects		**93**		**82**		**1**	
				Maximum				0.02		0.026	
			MDA	Average				0.02		0.021	
				Minimum				0.01		0.016	
				NonDetect's		**0**		**11**		**92**	

Table 2. Building T654 Indivdual Surface Soil Sample Results

NOTE: BOLD VALUES INDICATE DETECTED AND NON-BOLD VALUES INDICATE MDA FOR THAT SAMPLE

Sample #	Date	Grid #	Sub-Grid #	Weight (grams)		K-40 pCi/g	Error pCi/g	Cs-137 pCi/g	Error pCi/g	Co-60 pCi/g	Error pCi/g
654-97-0047	9/23/97	6,5	9	955	47	**17.16**	**0.80**	0.02	MDA	0.018	MDA
654-97-0048	9/23/97	6,6	4	848	48	**17.98**	**0.84**	**0.25**	**0.012**	0.021	MDA
654-97-0049	9/23/97	6,7	2	713	49	**20.38**	**0.96**	**1.93**	**0.086**	0.020	MDA
654-97-0050	9/23/97	6,8	8	842	50	**18.33**	**0.86**	**0.29**	**0.014**	0.020	MDA
654-97-0051	9/23/97	6,9	9	839	51	**20.40**	**0.95**	**0.12**	**0.007**	0.020	MDA
654-97-0052	9/23/97	6,10	5	925	52	**18.92**	**0.88**	**0.19**	**0.010**	0.019	MDA
654-97-0053	9/23/97	6,11	3	765	53	**20.10**	**0.94**	**0.04**	**0.003**	0.021	MDA
654-97-0054	9/23/97	6,12	8	855	54	**18.60**	**0.84**	**0.08**	**0.006**	0.019	MDA
654-97-0055	9/23/97	6,13	9	764	55	**20.55**	**0.92**	**0.04**	**0.004**	0.023	MDA
654-97-0056	9/23/97	6,14	5	881	56	**17.30**	**0.81**	**0.06**	**0.005**	0.019	MDA
654-97-0057	9/23/97	6,15	2	871	57	**19.11**	**0.89**	**0.06**	**0.005**	0.019	MDA
654-97-0058	9/23/97	6,16	3	1042	58	**17.27**	**0.80**	**0.02**	**0.003**	0.017	MDA
654-97-0059	9/23/97	6,17	6	778	59	**21.51**	**0.97**	**0.09**	**0.006**	0.022	MDA
654-97-0060	9/23/97	6,18	1	784	60	**21.61**	**1.01**	**0.06**	**0.005**	0.021	MDA
654-97-0061	9/23/97	6,19	5	796	61	**18.02**	**0.85**	**0.29**	**0.014**	0.019	MDA
654-97-0062	9/23/97	6,20	2	741	62	**17.10**	**0.81**	0.02	MDA	0.021	MDA
654-97-0063	9/23/97	6,21	9	751	63	**17.64**	**0.80**	0.02	MDA	0.019	MDA
654-97-0064	9/24/97	6,22	3	885	64	**17.81**	**0.83**	**0.02**	**0.003**	0.018	MDA
654-97-0065	9/24/97	7,1	6	744	65	**19.19**	**0.90**	**0.17**	**0.011**	0.022	MDA
654-97-0066	9/24/97	7,2	9	688	66	**20.19**	**0.95**	**0.22**	**0.012**	0.024	MDA
654-97-0067	9/24/97	7,3	2	718	67	**21.11**	**0.96**	**0.26**	**0.013**	0.022	MDA
654-97-0068	9/24/97	7,4	8	774	68	**19.71**	**0.92**	**0.37**	**0.017**	0.023	MDA
654-97-0069	9/24/97	7,5	5	712	69	**20.00**	**0.90**	**1.82**	**0.082**	0.021	MDA
654-97-0070	9/24/97	7,6	9	771	70	**20.54**	**0.96**	**1.68**	**0.075**	0.022	MDA
654-97-0071	9/24/97	7,7	7	774	71	**20.20**	**0.95**	**4.35**	**0.188**	0.021	MDA
654-97-0072	9/24/97	7,8	4	773	72	**19.03**	**0.90**	**0.62**	**0.029**	0.019	MDA
654-97-0073	9/24/97	7,9	3	864	73	**18.90**	**0.85**	**0.02**	**0.003**	0.020	MDA
654-97-0074	9/24/97	7,10	1	874	74	**19.55**	**0.88**	0.02	MDA	0.019	MDA
654-97-0075	9/24/97	7,11	8	822	75	**20.07**	**0.94**	**0.27**	**0.013**	0.020	MDA
654-97-0076	9/24/97	7,12	4	813	76	**19.47**	**0.88**	**0.18**	**0.009**	0.020	MDA
654-97-0077	9/24/97	7,13	5	786	77	**21.63**	**0.98**	**1.24**	**0.055**	0.021	MDA
654-97-0078	9/24/97	7,14	9	762	78	**20.87**	**0.93**	**0.34**	**0.017**	0.021	MDA
654-97-0079	9/24/97	7,15	5	751	79	**19.69**	**0.93**	**0.05**	**0.005**	0.022	MDA
654-97-0080	9/24/97	7,16	2	800	80	**19.05**	**0.86**	**0.04**	**0.005**	0.021	MDA
654-97-0081	9/24/97	7,17	7	790	81	**20.45**	**0.96**	**0.51**	**0.024**	0.022	MDA
654-97-0082	9/24/97	7,18	3	822	82	**19.05**	**0.86**	**0.03**	**0.004**	0.021	MDA
654-97-0083	9/24/97	7,19	5	748	83	**19.66**	**0.92**	**0.04**	**0.004**	0.023	MDA
654-97-0084	9/24/97	7,20	4	767	84	**20.16**	**0.89**	**0.07**	**0.006**	0.021	MDA
654-97-0085	9/24/97	7,21	8	763	85	**21.66**	**1.01**	**0.10**	**0.006**	**0.023**	**0.005**
654-97-0086	9/24/97	7,23	4	789	86	**20.62**	**0.93**	**0.11**	**0.007**	0.022	MDA
654-97-0087	9/24/97	3,12	ckhoe disturba	669	87	**21.32**	**0.95**	**0.08**	**0.006**	0.023	MDA
654-97-0088	9/24/97	3,13	ckhoe disturba	641	88	**21.50**	**1.02**	**0.11**	**0.007**	0.026	MDA
654-97-0089	9/24/97	3,15	ckhoe disturba	701	89	**21.06**	**0.99**	**0.06**	**0.005**	0.022	MDA
654-97-0090	9/24/97	8,10	ckhoe disturba	677	90	**21.48**	**1.01**	**1.34**	**0.060**	0.022	MDA
654-97-0091	9/24/97	8,12	ckhoe disturba	659	91	**21.42**	**1.01**	**6.99**	**0.305**	0.023	MDA
654-97-0092	9/24/97	8,14	ckhoe disturba	661	92	**20.58**	**0.97**	**0.66**	**0.031**	0.024	MDA
654-97-0093	9/24/97	8,16	ckhoe disturba	677	93	**20.62**	**0.97**	**0.93**	**0.043**	0.023	MDA

	Maximum	**21.66**	**6.99**	**0.023**
Detect	**Average**	**19.78**	**0.47**	**0.023**
	Minimum	**17.10**	**0.01**	**0.023**
	Detects	**93**	**82**	**1**
	Maximum		0.02	0.026
MDA	Average		0.02	0.021
	Minimum		0.01	0.016
	NonDetect's	**0**	**11**	**92**

Table 2. Building T654 Indivdual Surface Soil Sample Results

NOTE: BOLD VALUES INDICATE DETECTED AND NON-BOLD VALUES INDICATE MDA FOR THAT SAMPLE

Sample #	Date	Grid #	Sub-Grid #	Weight (grams)		Tl-208 pCi/g	Error pCi/g	Pb-212 pCi/g	Error pCi/g	Bi-212 pCi/g	Error pCi/g
654-97-0001	9/22/97	1,2	8	712	1	**0.36**	**0.01**	**1.77**	**0.09**	0.14	MDA
654-97-0002	9/22/97	2,1	5	759	2	**0.37**	**0.01**	**1.22**	**0.06**	0.14	MDA
654-97-0003	9/22/97	2,3	3	715	3	**0.38**	**0.02**	**1.30**	**0.06**	**1.44**	**0.28**
654-97-0004	9/22/97	2,5	7	789	4	**0.40**	**0.01**	**1.26**	**0.06**	**1.14**	**0.20**
654-97-0005	9/22/97	2,22	4	755	5	**0.38**	**0.01**	**1.23**	**0.06**	**0.98**	**0.15**
654-97-0006	9/22/97	3,2	5	733	6	**0.35**	**0.01**	**1.21**	**0.06**	**0.84**	**0.20**
654-97-0007	9/22/97	3,4	4	650	7	**0.42**	**0.02**	**1.31**	**0.06**	0.14	MDA
654-97-0008	9/22/97	3,6	9	812	8	**0.39**	**0.02**	**1.27**	**0.06**	0.13	MDA
654-97-0009	9/22/97	3,8	1	629	9	**0.39**	**0.02**	**1.31**	**0.06**	0.15	MDA
654-97-0010	9/22/97	3,23	4	953	10	**0.41**	**0.02**	**1.38**	**0.06**	**1.15**	**0.22**
654-97-0011	9/22/97	4,1	3	697	11	**0.36**	**0.01**	**1.17**	**0.06**	**0.82**	**0.20**
654-97-0012	9/22/97	4,3	5	833	12	**0.44**	**0.02**	**1.36**	**0.06**	**1.27**	**0.25**
654-97-0013	9/22/97	4,5	9	694	13	**0.37**	**0.02**	**1.35**	**0.06**	0.14	MDA
654-97-0014	9/22/97	4,7	5	811	14	**0.39**	**0.02**	**1.27**	**0.06**	**0.97**	**0.19**
654-97-0015	9/22/97	4,9	4	805	15	**0.40**	**0.02**	**1.32**	**0.06**	**0.71**	**0.19**
654-97-0016	9/22/97	4,10	1	765	16	**0.38**	**0.01**	**1.27**	**0.06**	0.15	MDA
654-97-0017	9/22/97	4,11	6	810	17	**0.41**	**0.02**	**1.25**	**0.06**	0.12	MDA
654-97-0018	9/23/97	4,12	9	814	18	**0.36**	**0.01**	**1.23**	**0.06**	**0.79**	**0.18**
654-97-0019	9/23/97	4,13	2	809	19	**0.38**	**0.02**	**1.38**	**0.06**	0.12	MDA
654-97-0020	9/23/97	4,14	3	843	20	**0.39**	**0.02**	**1.29**	**0.06**	0.11	MDA
654-97-0021	9/23/97	4,15	4	890	21	**0.40**	**0.02**	**1.18**	**0.06**	**0.87**	**0.17**
654-97-0022	9/23/97	4,16	8	819	22	**0.39**	**0.02**	**1.25**	**0.06**	**0.98**	**0.18**
654-97-0023	9/23/97	4,17	6	788	23	**0.42**	**0.02**	**1.32**	**0.06**	**0.79**	**0.18**
654-97-0024	9/23/97	4,18	7	784	24	**0.39**	**0.02**	**1.37**	**0.06**	0.13	MDA
654-97-0025	9/23/97	4,20	5	939	25	**0.42**	**0.02**	**1.32**	**0.06**	**1.07**	**0.17**
654-97-0026	9/23/97	4,22	1	988	26	**0.43**	**0.02**	**1.43**	**0.06**	0.11	MDA
654-97-0027	9/23/97	5,2	3	824	27	**0.37**	**0.01**	**1.18**	**0.06**	0.13	0.06
654-97-0028	9/23/97	5,4	9	785	28	**0.40**	**0.02**	**1.30**	**0.06**	**0.88**	**0.22**
654-97-0029	9/23/97	5,6	7	809	29	**0.37**	**0.02**	**1.22**	**0.06**	**0.89**	**0.18**
654-97-0030	9/23/97	5,8	4	848	30	**0.41**	**0.02**	**1.35**	**0.06**	**1.07**	**0.20**
654-97-0031	9/23/97	5,9	3	769	31	**0.42**	**0.02**	**1.29**	**0.06**	**1.39**	**0.29**
654-97-0032	9/23/97	5,10	1	726	32	**0.38**	**0.02**	**1.22**	**0.06**	**1.08**	**0.20**
654-97-0033	9/23/97	5,11	8	803	33	**0.41**	**0.02**	**1.33**	**0.06**	**0.93**	**0.19**
654-97-0034	9/23/97	5,12	2	861	34	**0.36**	**0.01**	**1.21**	**0.06**	**0.95**	**0.18**
654-97-0035	9/23/97	5,13	7	885	35	**0.37**	**0.01**	**1.18**	**0.06**	0.12	MDA
654-97-0036	9/23/97	5,14	4	804	36	**0.38**	**0.02**	**1.26**	**0.06**	0.13	MDA
654-97-0037	9/23/97	5,15	2	821	37	**0.38**	**0.01**	**1.24**	**0.06**	0.13	MDA
654-97-0038	9/23/97	5,16	6	715	38	**0.41**	**0.01**	**1.34**	**0.06**	0.13	MDA
654-97-0039	9/23/97	5,17	3	891	39	**0.37**	**0.01**	**1.24**	**0.06**	0.11	MDA
654-97-0040	9/23/97	5,19	7	820	40	**0.39**	**0.01**	**1.35**	**0.06**	**2.22**	**0.42**
654-97-0041	9/23/97	5,21	1	853	41	**0.44**	**0.02**	**1.51**	**0.07**	**0.91**	**0.19**
654-97-0042	9/23/97	5,23	7	904	42	**0.26**	**0.01**	**0.89**	**0.04**	**0.68**	**0.16**
654-97-0043	9/23/97	6,1	1	820	43	**0.36**	**0.01**	**1.24**	**0.06**	**1.04**	**0.19**
654-97-0044	9/23/97	6,2	4	756	44	**0.38**	**0.01**	**1.28**	**0.06**	**1.28**	**0.25**
654-97-0045	9/23/97	6,3	8	909	45	**0.26**	**0.01**	**0.86**	**0.04**	0.10	MDA
654-97-0046	9/23/97	6,4	9	993	46	**0.23**	**0.01**	**0.79**	**0.04**	0.09	MDA

	Maximum	**0.54**	**1.77**	**2.22**
Detect	**Average**	**0.37**	**1.24**	**0.97**
	Minimum	**0.23**	**0.79**	**0.52**
	Detects	**93**	**93**	**50**
	Maximum			0.17
MDA	Average			0.13
	Minimum			0.09
	NonDetect's	**0**	**0**	**43**

Table 2. Building T654 Indivdual Surface Soil Sample Results

NOTE: BOLD VALUES INDICATE DETECTED AND NON-BOLD VALUES INDICATE MDA FOR THAT SAMPLE

Sample #	Date	Grid #	Sub-Grid #	Weight (grams)		Tl-208 pCi/g	Error pCi/g	Pb-212 pCi/g	Error pCi/g	Bi-212 pCi/g	Error pCi/g
654-97-0047	9/23/97	6,5	9	955	47	**0.25**	**0.01**	**0.84**	**0.04**	**0.52**	**0.15**
654-97-0048	9/23/97	6,6	4	848	48	**0.26**	**0.01**	**0.88**	**0.05**	**0.94**	**0.17**
654-97-0049	9/23/97	6,7	2	713	49	**0.34**	**0.01**	**1.14**	**0.05**	0.13	MDA
654-97-0050	9/23/97	6,8	8	842	50	**0.32**	**0.01**	**1.00**	**0.05**	0.11	0.06
654-97-0051	9/23/97	6,9	9	839	51	**0.29**	**0.01**	**0.97**	**0.05**	**0.79**	**0.22**
654-97-0052	9/23/97	6,10	5	925	52	**0.31**	**0.01**	**1.05**	**0.05**	**0.84**	**0.17**
654-97-0053	9/23/97	6,11	3	765	53	**0.42**	**0.02**	**1.43**	**0.07**	0.12	MDA
654-97-0054	9/23/97	6,12	8	855	54	**0.38**	**0.01**	**1.17**	**0.06**	0.11	MDA
654-97-0055	9/23/97	6,13	9	764	55	**0.41**	**0.02**	**1.28**	**0.06**	0.13	MDA
654-97-0056	9/23/97	6,14	5	881	56	**0.31**	**0.01**	**1.10**	**0.05**	**0.72**	**0.17**
654-97-0057	9/23/97	6,15	2	871	57	**0.34**	**0.01**	**1.05**	**0.05**	0.11	MDA
654-97-0058	9/23/97	6,16	3	1042	58	**0.27**	**0.01**	**0.90**	**0.04**	0.10	MDA
654-97-0059	9/23/97	6,17	6	778	59	**0.45**	**0.02**	**1.41**	**0.07**	**1.07**	**0.20**
654-97-0060	9/23/97	6,18	1	784	60	**0.41**	**0.02**	**1.41**	**0.06**	0.13	MDA
654-97-0061	9/23/97	6,19	5	796	61	**0.29**	**0.01**	**0.97**	**0.04**	**0.81**	**0.19**
654-97-0062	9/23/97	6,20	2	741	62	**0.31**	**0.01**	**1.00**	**0.05**	0.13	MDA
654-97-0063	9/23/97	6,21	9	751	63	**0.25**	**0.01**	**0.85**	**0.04**	0.11	MDA
654-97-0064	9/24/97	6,22	3	885	64	**0.25**	**0.01**	**0.87**	**0.04**	0.11	MDA
654-97-0065	9/24/97	7,1	6	744	65	**0.37**	**0.02**	**1.22**	**0.06**	**1.27**	**0.19**
654-97-0066	9/24/97	7,2	9	688	66	**0.54**	**0.02**	**1.70**	**0.08**	0.17	MDA
654-97-0067	9/24/97	7,3	2	718	67	**0.38**	**0.02**	**1.29**	**0.06**	**0.84**	**0.20**
654-97-0068	9/24/97	7,4	8	774	68	**0.41**	**0.01**	**1.28**	**0.06**	**0.99**	**0.20**
654-97-0069	9/24/97	7,5	5	712	69	**0.38**	**0.02**	**1.28**	**0.06**	**0.91**	**0.20**
654-97-0070	9/24/97	7,6	9	771	70	**0.37**	**0.02**	**1.34**	**0.06**	**1.00**	**0.21**
654-97-0071	9/24/97	7,7	7	774	71	**0.41**	**0.02**	**1.24**	**0.06**	0.14	MDA
654-97-0072	9/24/97	7,8	4	773	72	**0.31**	**0.01**	**1.10**	**0.05**	0.11	MDA
654-97-0073	9/24/97	7,9	3	864	73	**0.36**	**0.01**	**1.20**	**0.06**	**0.83**	**0.17**
654-97-0074	9/24/97	7,10	1	874	74	**0.32**	**0.01**	**1.07**	**0.05**	0.10	MDA
654-97-0075	9/24/97	7,11	8	822	75	**0.41**	**0.01**	**1.29**	**0.06**	**0.91**	**0.18**
654-97-0076	9/24/97	7,12	4	813	76	**0.40**	**0.01**	**1.30**	**0.06**	**0.83**	**0.19**
654-97-0077	9/24/97	7,13	5	786	77	**0.38**	**0.02**	**1.26**	**0.06**	**0.95**	**0.19**
654-97-0078	9/24/97	7,14	9	762	78	**0.42**	**0.02**	**1.31**	**0.06**	**0.89**	**0.19**
654-97-0079	9/24/97	7,15	5	751	79	**0.41**	**0.02**	**1.35**	**0.06**	**0.89**	**0.20**
654-97-0080	9/24/97	7,16	2	800	80	**0.41**	**0.02**	**1.33**	**0.06**	**0.76**	**0.19**
654-97-0081	9/24/97	7,17	7	790	81	**0.40**	**0.02**	**1.31**	**0.06**	**1.22**	**0.26**
654-97-0082	9/24/97	7,18	3	822	82	**0.40**	**0.02**	**1.41**	**0.07**	**0.68**	**0.09**
654-97-0083	9/24/97	7,19	5	748	83	**0.40**	**0.02**	**1.34**	**0.06**	**0.93**	**0.20**
654-97-0084	9/24/97	7,20	4	767	84	**0.42**	**0.02**	**1.41**	**0.07**	**0.95**	**0.20**
654-97-0085	9/24/97	7,21	8	763	85	**0.39**	**0.02**	**1.26**	**0.06**	0.11	MDA
654-97-0086	9/24/97	7,23	4	789	86	**0.36**	**0.01**	**1.15**	**0.06**	0.13	MDA
654-97-0087	9/24/97	3,12	ckhoe disturba	669	87	**0.44**	**0.03**	**1.41**	**0.07**	0.12	MDA
654-97-0088	9/24/97	3,13	ckhoe disturba	641	88	**0.39**	**0.02**	**1.41**	**0.07**	0.11	MDA
654-97-0089	9/24/97	3,15	ckhoe disturba	701	89	**0.42**	**0.02**	**1.45**	**0.07**	**1.07**	**0.22**
654-97-0090	9/24/97	8,10	ckhoe disturba	677	90	**0.38**	**0.02**	**1.31**	**0.06**	0.13	MDA
654-97-0091	9/24/97	8,12	ckhoe disturba	659	91	**0.34**	**0.01**	**1.21**	**0.06**	0.14	MDA
654-97-0092	9/24/97	8,14	ckhoe disturba	661	92	**0.40**	**0.02**	**1.38**	**0.07**	0.14	MDA
654-97-0093	9/24/97	8,16	ckhoe disturba	677	93	**0.38**	**0.02**	**1.32**	**0.06**	0.15	MDA

	Maximum	**0.54**	**1.77**	**2.22**
Detect	Average	**0.37**	**1.24**	**0.97**
	Minimum	**0.23**	**0.79**	**0.52**
	Detects	**93**	**93**	**50**
	Maximum			0.17
MDA	Average			0.13
	Minimum			0.09
	NonDetect's	**0**	**0**	**43**

Table 2. Building T654 Indivdual Surface Soil Sample Results

NOTE: BOLD VALUES INDICATE DETECTED AND NON-BOLD VALUES INDICATE MDA FOR THAT SAMPLE

Sample #	Date	Grid #	Sub-Grid #	Weight (grams)		Ra-224 pCi/g	Error pCi/g	Ac-228 pCi/g	Error pCi/g	Pb-210 pCi/g	Error pCi/g
654-97-0001	9/22/97	1,2	8	712	1	**1.09**	**0.13**	**0.92**	**0.02**	0.79	MDA
654-97-0002	9/22/97	2,1	5	759	2	**1.17**	**0.09**	**0.98**	**0.02**	0.75	MDA
654-97-0003	9/22/97	2,3	3	715	3	**1.41**	**0.11**	**1.04**	**0.03**	**0.79**	**0.11**
654-97-0004	9/22/97	2,5	7	789	4	**1.15**	**0.11**	**1.04**	**0.02**	**0.95**	**0.14**
654-97-0005	9/22/97	2,22	4	755	5	**1.35**	**0.12**	**1.05**	**0.03**	0.74	MDA
654-97-0006	9/22/97	3,2	5	733	6	**1.21**	**0.10**	**1.11**	**0.03**	0.87	MDA
654-97-0007	9/22/97	3,4	4	650	7	**1.40**	**0.11**	**1.14**	**0.03**	**0.81**	**0.14**
654-97-0008	9/22/97	3,6	9	812	8	**1.13**	**0.12**	**1.05**	**0.03**	**0.72**	**0.11**
654-97-0009	9/22/97	3,8	1	629	9	**1.16**	**0.12**	**1.13**	**0.03**	**1.26**	**0.13**
654-97-0010	9/22/97	3,23	4	953	10	**1.33**	**0.13**	**1.14**	**0.03**	**0.83**	**0.12**
654-97-0011	9/22/97	4,1	3	697	11	**1.00**	**0.12**	**1.03**	**0.03**	**1.04**	**0.09**
654-97-0012	9/22/97	4,3	5	833	12	**1.29**	**0.11**	**1.14**	**0.03**	**0.81**	**0.10**
654-97-0013	9/22/97	4,5	9	694	13	**1.44**	**0.14**	**1.09**	**0.03**	0.80	MDA
654-97-0014	9/22/97	4,7	5	811	14	**1.19**	**0.10**	**0.99**	**0.03**	0.72	MDA
654-97-0015	9/22/97	4,9	4	805	15	**1.06**	**0.10**	**1.05**	**0.03**	**0.84**	**0.10**
654-97-0016	9/22/97	4,10	1	765	16	**1.19**	**0.11**	**1.07**	**0.03**	**0.80**	**0.12**
654-97-0017	9/22/97	4,11	6	810	17	**1.16**	**0.11**	**1.05**	**0.03**	0.74	MDA
654-97-0018	9/23/97	4,12	9	814	18	**1.21**	**0.10**	**0.99**	**0.03**	0.73	MDA
654-97-0019	9/23/97	4,13	2	809	19	**1.29**	**0.10**	**1.08**	**0.03**	**0.88**	**0.10**
654-97-0020	9/23/97	4,14	3	843	20	**1.40**	**0.11**	**1.00**	**0.03**	**0.75**	**0.07**
654-97-0021	9/23/97	4,15	4	890	21	**1.26**	**0.10**	**1.00**	**0.03**	**0.74**	**0.12**
654-97-0022	9/23/97	4,16	8	819	22	**1.08**	**0.12**	**1.02**	**0.29**	**0.69**	**0.12**
654-97-0023	9/23/97	4,17	6	788	23	**1.32**	**0.11**	**1.14**	**0.03**	0.75	MDA
654-97-0024	9/23/97	4,18	7	784	24	**1.44**	**0.11**	**1.10**	**0.03**	0.79	MDA
654-97-0025	9/23/97	4,20	5	939	25	**1.51**	**0.12**	**1.09**	**0.03**	**0.63**	**0.15**
654-97-0026	9/23/97	4,22	1	988	26	**1.31**	**0.10**	**1.21**	**0.03**	0.68	MDA
654-97-0027	9/23/97	5,2	3	824	27	**1.24**	**0.10**	**1.01**	**0.03**	0.73	MDA
654-97-0028	9/23/97	5,4	9	785	28	**1.18**	**0.11**	**1.04**	**0.03**	**0.80**	**0.10**
654-97-0029	9/23/97	5,6	7	809	29	**1.15**	**0.10**	**1.02**	**0.03**	**0.83**	**0.10**
654-97-0030	9/23/97	5,8	4	848	30	**1.34**	**0.11**	**1.07**	**0.03**	**0.97**	**0.12**
654-97-0031	9/23/97	5,9	3	769	31	**1.33**	**0.12**	**1.13**	**0.03**	**0.77**	**0.39**
654-97-0032	9/23/97	5,10	1	726	32	**1.24**	**0.11**	**1.07**	**0.03**	**1.18**	**0.10**
654-97-0033	9/23/97	5,11	8	803	33	**1.49**	**0.12**	**1.08**	**0.03**	**0.74**	**0.08**
654-97-0034	9/23/97	5,12	2	861	34	**1.21**	**0.11**	**1.01**	**0.03**	**0.75**	**0.09**
654-97-0035	9/23/97	5,13	7	885	35	**1.34**	**0.10**	**0.94**	**0.02**	0.65	MDA
654-97-0036	9/23/97	5,14	4	804	36	**1.06**	**0.07**	**1.09**	**0.03**	**0.64**	**0.11**
654-97-0037	9/23/97	5,15	2	821	37	**1.34**	**0.11**	**1.05**	**0.03**	**0.79**	**0.15**
654-97-0038	9/23/97	5,16	6	715	38	**1.32**	**0.14**	**1.21**	**0.03**	**0.73**	**0.11**
654-97-0039	9/23/97	5,17	3	891	39	**1.41**	**0.12**	**1.02**	**0.03**	**1.01**	**0.09**
654-97-0040	9/23/97	5,19	7	820	40	**1.28**	**0.12**	**1.13**	**0.03**	**0.76**	**0.10**
654-97-0041	9/23/97	5,21	1	853	41	**1.38**	**0.11**	**1.21**	**0.03**	0.73	MDA
654-97-0042	9/23/97	5,23	7	904	42	**0.69**	**0.08**	**0.75**	**0.02**	0.58	MDA
654-97-0043	9/23/97	6,1	1	820	43	**1.06**	**0.09**	**1.04**	**0.03**	**0.73**	**0.10**
654-97-0044	9/23/97	6,2	4	756	44	**1.50**	**0.11**	**1.09**	**0.03**	**0.73**	**0.11**
654-97-0045	9/23/97	6,3	8	909	45	**0.88**	**0.08**	**0.68**	**0.02**	0.55	MDA
654-97-0046	9/23/97	6,4	9	993	46	**0.84**	**0.07**	**0.66**	**0.02**	**0.61**	**0.09**
				Maximum		**1.74**		**1.37**		**1.28**	
			Detect	**Average**		**1.22**		**1.03**		**0.84**	
				Minimum		**0.69**		**0.66**		**0.49**	
				Detects		**92**		**93**		**59**	
				Maximum		0.32				0.87	
			MDA	Average		0.32				0.72	
				Minimum		0.32				0.53	
				NonDetect's		1		0		34	

Table 2. Building T654 Indivdual Surface Soil Sample Results

NOTE: BOLD VALUES INDICATE DETECTED AND NON-BOLD VALUES INDICATE MDA FOR THAT SAMPLE

Sample #	Date	Grid #	Sub-Grid #	Weight (grams)		Ra-224 pCi/g	Error pCi/g	Ac-228 pCi/g	Error pCi/g	Pb-210 pCi/g	Error pCi/g
654-97-0047	9/23/97	6,5	9	955	47	**0.89**	**0.09**	**0.71**	**0.02**	**0.51**	**0.10**
654-97-0048	9/23/97	6,6	4	848	48	0.32	MDA	**0.82**	**0.02**	0.63	MDA
654-97-0049	9/23/97	6,7	2	713	49	**1.07**	**0.09**	**0.99**	**0.03**	0.79	MDA
654-97-0050	9/23/97	6,8	8	842	50	**0.94**	**0.08**	**0.82**	**0.02**	0.67	MDA
654-97-0051	9/23/97	6,9	9	839	51	**1.00**	**0.09**	**0.87**	**0.02**	0.64	MDA
654-97-0052	9/23/97	6,10	5	925	52	**0.99**	**0.11**	**0.90**	**0.02**	**0.89**	**0.10**
654-97-0053	9/23/97	6,11	3	765	53	**1.42**	**0.11**	**1.10**	**0.03**	**1.15**	**0.12**
654-97-0054	9/23/97	6,12	8	855	54	**1.11**	**0.11**	**1.04**	**0.03**	**0.94**	**0.12**
654-97-0055	9/23/97	6,13	9	764	55	**1.53**	**0.14**	**1.15**	**0.03**	**0.99**	**0.11**
654-97-0056	9/23/97	6,14	5	881	56	**1.27**	**0.11**	**0.88**	**0.02**	**0.81**	**0.08**
654-97-0057	9/23/97	6,15	2	871	57	**1.11**	**0.08**	**0.91**	**0.02**	**0.76**	**0.08**
654-97-0058	9/23/97	6,16	3	1042	58	**1.02**	**0.07**	**0.74**	**0.02**	0.53	MDA
654-97-0059	9/23/97	6,17	6	778	59	**1.51**	**0.12**	**1.22**	**0.03**	0.64	MDA
654-97-0060	9/23/97	6,18	1	784	60	**1.50**	**0.11**	**1.13**	**0.03**	0.76	MDA
654-97-0061	9/23/97	6,19	5	796	61	**0.96**	**0.08**	**0.80**	**0.02**	**0.49**	**0.09**
654-97-0062	9/23/97	6,20	2	741	62	**1.07**	**0.10**	**0.85**	**0.02**	0.67	MDA
654-97-0063	9/23/97	6,21	9	751	63	**0.84**	**0.10**	**0.74**	**0.02**	0.67	MDA
654-97-0064	9/24/97	6,22	3	885	64	**0.77**	**0.08**	**0.71**	**0.02**	0.60	MDA
654-97-0065	9/24/97	7,1	6	744	65	**1.26**	**0.13**	**1.10**	**0.03**	**0.65**	**0.11**
654-97-0066	9/24/97	7,2	9	688	66	**1.74**	**0.16**	**1.37**	**0.03**	**1.18**	**0.15**
654-97-0067	9/24/97	7,3	2	718	67	**1.24**	**0.12**	**1.08**	**0.03**	**0.89**	**0.08**
654-97-0068	9/24/97	7,4	8	774	68	**1.21**	**0.11**	**1.07**	**0.03**	**0.91**	**0.11**
654-97-0069	9/24/97	7,5	5	712	69	**1.37**	**0.12**	**1.13**	**0.03**	**1.01**	**0.12**
654-97-0070	9/24/97	7,6	9	771	70	**1.18**	**0.10**	**1.08**	**0.03**	**0.81**	**0.14**
654-97-0071	9/24/97	7,7	7	774	71	**1.31**	**0.12**	**1.06**	**0.03**	0.85	MDA
654-97-0072	9/24/97	7,8	4	773	72	**1.14**	**0.11**	**0.98**	**0.03**	**0.87**	**0.11**
654-97-0073	9/24/97	7,9	3	864	73	**0.92**	**0.08**	**0.95**	**0.03**	**0.52**	**0.12**
654-97-0074	9/24/97	7,10	1	874	74	**1.05**	**0.09**	**0.85**	**0.02**	**0.65**	**0.09**
654-97-0075	9/24/97	7,11	8	822	75	**1.44**	**0.12**	**1.14**	**0.03**	0.65	MDA
654-97-0076	9/24/97	7,12	4	813	76	**1.27**	**0.10**	**1.08**	**0.03**	0.75	MDA
654-97-0077	9/24/97	7,13	5	786	77	**1.46**	**0.13**	**1.12**	**0.03**	**0.91**	**0.07**
654-97-0078	9/24/97	7,14	9	762	78	**1.16**	**0.12**	**1.10**	**0.03**	0.79	MDA
654-97-0079	9/24/97	7,15	5	751	79	**1.23**	**0.11**	**1.16**	**0.03**	**0.96**	**0.10**
654-97-0080	9/24/97	7,16	2	800	80	**1.17**	**0.10**	**1.12**	**0.03**	0.77	MDA
654-97-0081	9/24/97	7,17	7	790	81	**1.13**	**0.11**	**1.15**	**0.03**	**0.90**	**0.12**
654-97-0082	9/24/97	7,18	3	822	82	**1.37**	**0.11**	**1.16**	**0.03**	**0.81**	**0.09**
654-97-0083	9/24/97	7,19	5	748	83	**1.16**	**0.10**	**1.16**	**0.03**	0.76	MDA
654-97-0084	9/24/97	7,20	4	767	84	**1.35**	**0.12**	**1.14**	**0.03**	**0.60**	**0.11**
654-97-0085	9/24/97	7,21	8	763	85	**1.18**	**0.11**	**0.98**	**0.03**	**1.06**	**0.12**
654-97-0086	9/24/97	7,23	4	789	86	**1.04**	**0.12**	**0.94**	**0.02**	**0.72**	**0.12**
654-97-0087	9/24/97	3,12	[illegible]	669	87	**1.16**	**0.11**	**1.11**	**0.03**	0.87	MDA
654-97-0088	9/24/97	3,13	[illegible]	641	88	**1.27**	**0.12**	**1.16**	**0.03**	**0.83**	**0.15**
654-97-0089	9/24/97	3,15	[illegible]	701	89	**1.53**	**0.13**	**1.16**	**0.03**	**1.10**	**0.12**
654-97-0090	9/24/97	8,10	[illegible]	677	90	**1.14**	**0.11**	**1.10**	**0.03**	**1.06**	**0.12**
654-97-0091	9/24/97	8,12	[illegible]	659	91	**1.09**	**0.12**	**1.04**	**0.03**	**1.28**	**0.14**
654-97-0092	9/24/97	8,14	[illegible]	661	92	**1.31**	**0.13**	**1.07**	**0.03**	**1.00**	**0.10**
654-97-0093	9/24/97	8,16	[illegible]	677	93	**1.43**	**0.13**	**1.02**	**0.03**	0.84	MDA

Detect	Maximum	**1.74**	**1.37**	**1.28**
	Average	**1.22**	**1.03**	**0.84**
	Minimum	**0.69**	**0.66**	**0.49**
	Detects	**92**	**93**	**59**
MDA	Maximum	0.32		0.87
	Average	0.32		0.72
	Minimum	0.32		0.53
	NonDetect's	**1**	**0**	**34**

Table 2. Building T654 Indivdual Surface Soil Sample Results

NOTE: BOLD VALUES INDICATE DETECTED AND NON-BOLD VALUES INDICATE MDA FOR THAT SAMPLE

Sample #	Date	Grid #	Sub-Grid #	Weight (grams)		Pb-214 pCi/g	Error pCi/g	Bi-214 pCi/g	Error pCi/g	Ra-226 pCi/g	Error pCi/g
654-97-0001	9/22/97	1,2	8	712	1	**0.87**	**0.03**	**0.80**	**0.03**	**0.94**	**0.06**
654-97-0002	9/22/97	2,1	5	759	2	**0.85**	**0.03**	**0.82**	**0.02**	**0.99**	**0.06**
654-97-0003	9/22/97	2,3	3	715	3	**0.83**	**0.03**	**0.79**	**0.02**	**0.95**	**0.06**
654-97-0004	9/22/97	2,5	7	789	4	**0.80**	**0.03**	**0.84**	**0.02**	**0.92**	**0.06**
654-97-0005	9/22/97	2,22	4	755	5	**0.70**	**0.02**	**0.66**	**0.02**	**0.77**	**0.05**
654-97-0006	9/22/97	3,2	5	733	6	**0.86**	**0.03**	**0.84**	**0.03**	**0.90**	**0.06**
654-97-0007	9/22/97	3,4	4	650	7	**0.82**	**0.03**	**0.85**	**0.04**	**0.92**	**0.06**
654-97-0008	9/22/97	3,6	9	812	8	**0.84**	**0.03**	**0.79**	**0.02**	**0.81**	**0.05**
654-97-0009	9/22/97	3,8	1	629	9	**0.85**	**0.03**	**0.82**	**0.03**	**0.93**	**0.06**
654-97-0010	9/22/97	3,23	4	953	10	**0.81**	**0.03**	**0.76**	**0.02**	**0.85**	**0.06**
654-97-0011	9/22/97	4,1	3	697	11	**0.80**	**0.03**	**0.73**	**0.03**	**0.98**	**0.06**
654-97-0012	9/22/97	4,3	5	833	12	**0.86**	**0.03**	**0.84**	**0.02**	**0.96**	**0.06**
654-97-0013	9/22/97	4,5	9	694	13	**0.84**	**0.03**	**0.81**	**0.03**	**0.97**	**0.08**
654-97-0014	9/22/97	4,7	5	811	14	**0.80**	**0.02**	**0.72**	**0.02**	**0.83**	**0.06**
654-97-0015	9/22/97	4,9	4	805	15	**0.79**	**0.03**	**0.80**	**0.02**	**0.88**	**0.05**
654-97-0016	9/22/97	4,10	1	765	16	**0.82**	**0.03**	**0.76**	**0.03**	0.88	MDA
654-97-0017	9/22/97	4,11	6	810	17	**0.83**	**0.03**	**0.85**	**0.03**	**0.81**	**0.07**
654-97-0018	9/23/97	4,12	9	814	18	**0.76**	**0.02**	**0.67**	**0.02**	**0.87**	**0.06**
654-97-0019	9/23/97	4,13	2	809	19	**0.88**	**0.03**	**0.81**	**0.02**	**1.00**	**0.06**
654-97-0020	9/23/97	4,14	3	843	20	**0.84**	**0.03**	**0.84**	**0.02**	**0.89**	**0.06**
654-97-0021	9/23/97	4,15	4	890	21	**0.75**	**0.02**	**0.76**	**0.02**	**0.79**	**0.05**
654-97-0022	9/23/97	4,16	8	819	22	**0.84**	**0.03**	**0.81**	**0.02**	**0.90**	**0.07**
654-97-0023	9/23/97	4,17	6	788	23	**0.86**	**0.03**	**0.80**	**0.03**	**0.98**	**0.08**
654-97-0024	9/23/97	4,18	7	784	24	**0.94**	**0.03**	**0.95**	**0.03**	**0.95**	**0.07**
654-97-0025	9/23/97	4,20	5	939	25	**0.74**	**0.02**	**0.66**	**0.02**	**0.64**	**0.05**
654-97-0026	9/23/97	4,22	1	988	26	**0.74**	**0.02**	**0.76**	**0.02**	**0.77**	**0.08**
654-97-0027	9/23/97	5,2	3	824	27	**0.79**	**0.02**	**0.70**	**0.02**	**0.68**	**0.05**
654-97-0028	9/23/97	5,4	9	785	28	**0.80**	**0.03**	**0.78**	**0.02**	**0.83**	**0.06**
654-97-0029	9/23/97	5,6	7	809	29	**0.74**	**0.02**	**0.73**	**0.02**	**0.92**	**0.06**
654-97-0030	9/23/97	5,8	4	848	30	**0.88**	**0.03**	**0.84**	**0.02**	**0.96**	**0.06**
654-97-0031	9/23/97	5,9	3	769	31	**0.81**	**0.03**	**0.81**	**0.03**	**0.97**	**0.07**
654-97-0032	9/23/97	5,10	1	726	32	**0.82**	**0.03**	**0.75**	**0.03**	**0.74**	**0.06**
654-97-0033	9/23/97	5,11	8	803	33	**0.83**	**0.03**	**0.82**	**0.02**	**0.89**	**0.07**
654-97-0034	9/23/97	5,12	2	861	34	**0.76**	**0.02**	**0.72**	**0.02**	**0.87**	**0.06**
654-97-0035	9/23/97	5,13	7	885	35	**0.77**	**0.02**	**0.74**	**0.02**	**0.75**	**0.05**
654-97-0036	9/23/97	5,14	4	804	36	**0.80**	**0.02**	**0.75**	**0.02**	**0.77**	**0.06**
654-97-0037	9/23/97	5,15	2	821	37	**0.76**	**0.02**	**0.78**	**0.02**	**0.71**	**0.05**
654-97-0038	9/23/97	5,16	6	715	38	**0.88**	**0.03**	**0.78**	**0.02**	**0.93**	**0.07**
654-97-0039	9/23/97	5,17	3	891	39	**0.79**	**0.03**	**0.76**	**0.02**	**0.79**	**0.06**
654-97-0040	9/23/97	5,19	7	820	40	**0.91**	**0.03**	**0.86**	**0.02**	**0.97**	**0.06**
654-97-0041	9/23/97	5,21	1	853	41	**0.82**	**0.03**	**0.75**	**0.02**	**0.88**	**0.06**
654-97-0042	9/23/97	5,23	7	904	42	**0.44**	**0.02**	**0.42**	**0.02**	**0.42**	**0.04**
654-97-0043	9/23/97	6,1	1	820	43	**0.97**	**0.03**	**0.94**	**0.03**	**0.89**	**0.06**
654-97-0044	9/23/97	6,2	4	756	44	**0.89**	**0.03**	**0.85**	**0.03**	**0.95**	**0.06**
654-97-0045	9/23/97	6,3	8	909	45	**0.37**	**0.02**	**0.35**	**0.01**	**0.40**	**0.04**
654-97-0046	9/23/97	6,4	9	993	46	**0.40**	**0.01**	**0.39**	**0.02**	**0.44**	**0.04**

Detect	**Maximum**	**1.37**	**1.22**	**1.63**
	Average	**0.80**	**0.76**	**0.81**
	Minimum	**0.37**	**0.35**	**0.30**
	Detects	**93**	**93**	**90**
MDA	Maximum			0.88
	Average			0.54
	Minimum			0.34
	NonDetect's	**0**	**0**	**3**

Table 2. Building T654 Indivdual Surface Soil Sample Results

NOTE: BOLD VALUES INDICATE DETECTED AND NON-BOLD VALUES INDICATE MDA FOR THAT SAMPLE

Sample #	Date	Grid #	Sub-Grid #	Weight (grams)		Pb-214 pCi/g	Error pCi/g	Bi-214 pCi/g	Error pCi/g	Ra-226 pCi/g	Error pCi/g
654-97-0047	9/23/97	6,5	9	955	47	**0.41**	**0.01**	**0.38**	**0.01**	**0.38**	**0.03**
654-97-0048	9/23/97	6,6	4	848	48	**0.47**	**0.02**	**0.49**	**0.02**	**0.54**	**0.03**
654-97-0049	9/23/97	6,7	2	713	49	**0.55**	**0.02**	**0.59**	**0.02**	**0.64**	**0.05**
654-97-0050	9/23/97	6,8	8	842	50	**0.53**	**0.02**	**0.56**	**0.00**	**0.48**	**0.04**
654-97-0051	9/23/97	6,9	9	839	51	**0.55**	**0.02**	**0.57**	**0.02**	**0.52**	**0.05**
654-97-0052	9/23/97	6,10	5	925	52	**0.59**	**0.02**	**0.58**	**0.02**	**0.65**	**0.05**
654-97-0053	9/23/97	6,11	3	765	53	**0.92**	**0.03**	**0.82**	**0.03**	**0.93**	**0.06**
654-97-0054	9/23/97	6,12	8	855	54	**0.77**	**0.02**	**0.71**	**0.02**	**0.78**	**0.05**
654-97-0055	9/23/97	6,13	9	764	55	**0.91**	**0.03**	**0.88**	**0.03**	**0.88**	**0.07**
654-97-0056	9/23/97	6,14	5	881	56	**0.71**	**0.02**	**0.65**	**0.02**	**0.64**	**0.05**
654-97-0057	9/23/97	6,15	2	871	57	**0.70**	**0.02**	**0.64**	**0.02**	0.34	MDA
654-97-0058	9/23/97	6,16	3	1042	58	**0.49**	**0.02**	**0.46**	**0.02**	**0.33**	**0.04**
654-97-0059	9/23/97	6,17	6	778	59	**0.85**	**0.03**	**0.81**	**0.03**	**0.89**	**0.06**
654-97-0060	9/23/97	6,18	1	784	60	**0.86**	**0.03**	**0.84**	**0.02**	**0.82**	**0.06**
654-97-0061	9/23/97	6,19	5	796	61	**0.52**	**0.02**	**0.48**	**0.02**	**0.47**	**0.04**
654-97-0062	9/23/97	6,20	2	741	62	**0.53**	**0.02**	**0.50**	**0.02**	**0.52**	**0.04**
654-97-0063	9/23/97	6,21	9	751	63	**0.43**	**0.02**	**0.41**	**0.02**	**0.30**	**0.04**
654-97-0064	9/24/97	6,22	3	885	64	**0.39**	**0.02**	**0.40**	**0.01**	**0.43**	**0.03**
654-97-0065	9/24/97	7,1	6	744	65	**1.10**	**0.03**	**1.07**	**0.03**	**1.16**	**0.07**
654-97-0066	9/24/97	7,2	9	688	66	**1.37**	**0.04**	**1.22**	**0.04**	**1.63**	**0.10**
654-97-0067	9/24/97	7,3	2	718	67	**0.95**	**0.03**	**0.89**	**0.03**	**0.92**	**0.07**
654-97-0068	9/24/97	7,4	8	774	68	**0.97**	**0.03**	**0.92**	**0.03**	**0.96**	**0.07**
654-97-0069	9/24/97	7,5	5	712	69	**0.92**	**0.03**	**0.87**	**0.03**	**0.92**	**0.07**
654-97-0070	9/24/97	7,6	9	771	70	**0.91**	**0.03**	**0.86**	**0.02**	**0.96**	**0.07**
654-97-0071	9/24/97	7,7	7	774	71	**0.86**	**0.03**	**0.88**	**0.03**	**0.95**	**0.07**
654-97-0072	9/24/97	7,8	4	773	72	**0.72**	**0.03**	**0.67**	**0.02**	**0.71**	**0.05**
654-97-0073	9/24/97	7,9	3	864	73	**0.78**	**0.02**	**0.69**	**0.02**	**0.85**	**0.05**
654-97-0074	9/24/97	7,10	1	874	74	**0.61**	**0.02**	**0.62**	**0.02**	**0.67**	**0.06**
654-97-0075	9/24/97	7,11	8	822	75	**0.86**	**0.29**	**0.78**	**0.02**	**0.85**	**0.08**
654-97-0076	9/24/97	7,12	4	813	76	**0.92**	**0.03**	**0.84**	**0.03**	**0.87**	**0.05**
654-97-0077	9/24/97	7,13	5	786	77	**0.87**	**0.03**	**0.83**	**0.03**	**0.70**	**0.07**
654-97-0078	9/24/97	7,14	9	762	78	**0.88**	**0.03**	**0.90**	**0.03**	**0.83**	**0.06**
654-97-0079	9/24/97	7,15	5	751	79	**0.94**	**0.03**	**0.90**	**0.03**	**1.04**	**0.08**
654-97-0080	9/24/97	7,16	2	800	80	**0.89**	**0.03**	**0.82**	**0.02**	**0.99**	**0.06**
654-97-0081	9/24/97	7,17	7	790	81	**0.87**	**0.03**	**0.82**	**0.03**	0.41	MDA
654-97-0082	9/24/97	7,18	3	822	82	**1.04**	**0.03**	**0.98**	**0.03**	**0.54**	**0.12**
654-97-0083	9/24/97	7,19	5	748	83	**0.87**	**0.03**	**0.84**	**0.03**	**0.98**	**0.07**
654-97-0084	9/24/97	7,20	4	767	84	**0.90**	**0.03**	**0.84**	**0.02**	**0.92**	**0.07**
654-97-0085	9/24/97	7,21	8	763	85	**0.73**	**0.02**	**0.71**	**0.02**	**0.77**	**0.05**
654-97-0086	9/24/97	7,23	4	789	86	**0.78**	**0.03**	**0.74**	**0.03**	**0.75**	**0.05**
654-97-0087	9/24/97	3,12	ckhoe disturba	669	87	**0.97**	**0.03**	**0.87**	**0.03**	**1.01**	**0.07**
654-97-0088	9/24/97	3,13	ckhoe disturba	641	88	**0.98**	**0.03**	**0.88**	**0.03**	**1.03**	**0.06**
654-97-0089	9/24/97	3,15	ckhoe disturba	701	89	**1.02**	**0.03**	**0.96**	**0.03**	**0.42**	**0.03**
654-97-0090	9/24/97	8,10	ckhoe disturba	677	90	**0.84**	**0.03**	**0.81**	**0.03**	**0.77**	**0.06**
654-97-0091	9/24/97	8,12	ckhoe disturba	659	91	**0.87**	**0.03**	**0.84**	**0.03**	**0.77**	**0.06**
654-97-0092	9/24/97	8,14	ckhoe disturba	661	92	**1.00**	**0.03**	**0.95**	**0.03**	**0.91**	**0.08**
654-97-0093	9/24/97	8,16	ckhoe disturba	677	93	**0.88**	**0.03**	**0.82**	**0.03**	**1.02**	**0.08**

	Maximum	**1.37**	**1.22**	**1.63**
Detect	**Average**	**0.80**	**0.76**	**0.81**
	Minimum	**0.37**	**0.35**	**0.30**
	Detects	**93**	**93**	**90**
	Maximum			0.88
MDA	Average			0.54
	Minimum			0.34
	NonDetect's	**0**	**0**	**3**

Table 2. Building T654 Indivdual Surface Soil Sample Results

NOTE: BOLD VALUES INDICATE DETECTED AND NON-BOLD VALUES INDICATE MDA FOR THAT SAMPLE

Sample #	Date	Grid #	Sub-Grid #	Weight (grams)		Th-234 pCi/g	Error pCi/g	Pa-234m pCi/g	Error pCi/g	U-235 pCi/g	Error pCi/g
654-97-0001	9/22/97	1,2	8	712	1	**1.02**	**0.10**	2.71	MDA	**0.05**	**0.003**
654-97-0002	9/22/97	2,1	5	759	2	**0.85**	**0.30**	2.52	MDA	**0.05**	**0.003**
654-97-0003	9/22/97	2,3	3	715	3	**0.72**	**0.07**	2.69	MDA	**0.05**	**0.003**
654-97-0004	9/22/97	2,5	7	789	4	**1.17**	**0.13**	2.52	MDA	**0.05**	**0.003**
654-97-0005	9/22/97	2,22	4	755	5	**0.74**	**0.08**	2.50	MDA	**0.04**	**0.003**
654-97-0006	9/22/97	3,2	5	733	6	**0.85**	**0.13**	2.83	MDA	**0.04**	**0.003**
654-97-0007	9/22/97	3,4	4	650	7	**0.74**	**0.09**	3.02	MDA	**0.05**	**0.003**
654-97-0008	9/22/97	3,6	9	812	8	**0.64**	**0.10**	2.44	MDA	**0.04**	**0.003**
654-97-0009	9/22/97	3,8	1	629	9	**0.82**	**0.10**	3.01	MDA	**0.05**	**0.003**
654-97-0010	9/22/97	3,23	4	953	10	**0.83**	**0.12**	2.23	MDA	**0.04**	**0.003**
654-97-0011	9/22/97	4,1	3	697	11	**0.86**	**0.12**	2.76	MDA	**0.05**	**0.003**
654-97-0012	9/22/97	4,3	5	833	12	**0.93**	**0.08**	2.58	MDA	**0.05**	**0.003**
654-97-0013	9/22/97	4,5	9	694	13	**1.04**	**0.09**	**2.67**	**0.38**	**0.05**	**0.004**
654-97-0014	9/22/97	4,7	5	811	14	**0.77**	**0.09**	**1.42**	**0.41**	**0.04**	**0.003**
654-97-0015	9/22/97	4,9	4	805	15	**0.87**	**0.10**	2.54	MDA	**0.04**	**0.003**
654-97-0016	9/22/97	4,10	1	765	16	**0.80**	**0.11**	2.70	MDA	**0.05**	**0.003**
654-97-0017	9/22/97	4,11	6	810	17	**0.83**	**0.09**	2.54	MDA	**0.04**	**0.003**
654-97-0018	9/23/97	4,12	9	814	18	**0.48**	**0.09**	2.47	MDA	**0.04**	**0.008**
654-97-0019	9/23/97	4,13	2	809	19	**0.82**	**0.10**	2.71	MDA	**0.05**	**0.006**
654-97-0020	9/23/97	4,14	3	843	20	**0.81**	**0.08**	2.61	MDA	**0.04**	**0.004**
654-97-0021	9/23/97	4,15	4	890	21	**0.64**	**0.08**	2.53	MDA	**0.04**	**0.005**
654-97-0022	9/23/97	4,16	8	819	22	**0.72**	**0.11**	2.52	MDA	**0.04**	**0.007**
654-97-0023	9/23/97	4,17	6	788	23	**0.89**	**0.09**	2.71	MDA	**0.05**	**0.005**
654-97-0024	9/23/97	4,18	7	784	24	**0.92**	**0.08**	2.66	MDA	**0.05**	**0.004**
654-97-0025	9/23/97	4,20	5	939	25	**0.59**	**0.10**	2.35	MDA	**0.03**	**0.006**
654-97-0026	9/23/97	4,22	1	988	26	**0.63**	**0.09**	2.37	MDA	**0.04**	**0.006**
654-97-0027	9/23/97	5,2	3	824	27	**0.61**	**0.10**	2.69	MDA	**0.04**	**0.006**
654-97-0028	9/23/97	5,4	9	785	28	**0.81**	**0.08**	2.73	MDA	**0.04**	**0.004**
654-97-0029	9/23/97	5,6	7	809	29	**0.70**	**0.09**	2.60	MDA	**0.05**	**0.006**
654-97-0030	9/23/97	5,8	4	848	30	**0.98**	**0.09**	2.52	MDA	**0.05**	**0.005**
654-97-0031	9/23/97	5,9	3	769	31	**0.74**	**0.08**	**1.73**	**0.30**	**0.05**	**0.005**
654-97-0032	9/23/97	5,10	1	726	32	**0.71**	**0.10**	**2.36**	**0.38**	**0.04**	**0.005**
654-97-0033	9/23/97	5,11	8	803	33	**0.93**	**0.11**	2.68	MDA	**0.04**	**0.005**
654-97-0034	9/23/97	5,12	2	861	34	**0.86**	**0.10**	2.33	MDA	**0.04**	**0.005**
654-97-0035	9/23/97	5,13	7	885	35	**0.57**	**0.07**	**1.44**	**0.42**	**0.04**	**0.005**
654-97-0036	9/23/97	5,14	4	804	36	**1.04**	**0.11**	**2.31**	**0.39**	**0.04**	**0.004**
654-97-0037	9/23/97	5,15	2	821	37	**0.52**	**0.07**	**1.40**	**0.35**	**0.04**	**0.005**
654-97-0038	9/23/97	5,16	6	715	38	**0.88**	**0.08**	**1.48**	**0.39**	**0.05**	**0.004**
654-97-0039	9/23/97	5,17	3	891	39	**0.94**	**0.10**	2.39	MDA	**0.04**	**0.004**
654-97-0040	9/23/97	5,19	7	820	40	**1.13**	**0.09**	2.49	MDA	**0.05**	**0.004**
654-97-0041	9/23/97	5,21	1	853	41	**0.96**	**0.09**	2.45	MDA	**0.04**	**0.004**
654-97-0042	9/23/97	5,23	7	904	42	**0.40**	**0.07**	2.12	MDA	**0.02**	**0.004**
654-97-0043	9/23/97	6,1	1	820	43	**0.91**	**0.09**	2.82	MDA	**0.04**	**0.004**
654-97-0044	9/23/97	6,2	4	756	44	**1.14**	**0.12**	2.48	MDA	**0.05**	**0.005**
654-97-0045	9/23/97	6,3	8	909	45	**0.33**	**0.06**	2.25	MDA	**0.02**	**0.004**
654-97-0046	9/23/97	6,4	9	993	46	**0.33**	**0.05**	1.96	MDA	**0.02**	**0.003**
				Maximum		**1.74**		**2.88**		**0.08**	
			Detect	**Average**		**0.77**		**1.92**		**0.04**	
				Minimum		**0.24**		**1.40**		**0.01**	
				Detects		**93**		**13**		**93**	
				Maximum				3.12			
			MDA	Average				2.56			
				Minimum				1.82			
				NonDetect's		**0**		**80**		**0**	

Table 2. Building T654 Indivdual Surface Soil Sample Results

NOTE: BOLD VALUES INDICATE DETECTED AND NON-BOLD VALUES INDICATE MDA FOR THAT SAMPLE

Sample #	Date	Grid #	Sub-Grid #	Weight (grams)		Th-234 pCi/g	Error pCi/g	Pa-234m pCi/g	Error pCi/g	U-235 pCi/g	Error pCi/g
654-97-0047	9/23/97	6,5	9	955	47	**0.39**	**0.07**	2.09	MDA	**0.02**	**0.002**
654-97-0048	9/23/97	6,6	4	848	48	**0.62**	**0.07**	2.20	MDA	**0.03**	**0.002**
654-97-0049	9/23/97	6,7	2	713	49	**0.96**	**0.11**	2.69	MDA	**0.03**	**0.003**
654-97-0050	9/23/97	6,8	8	842	50	**0.71**	**0.07**	2.18	MDA	**0.02**	**0.002**
654-97-0051	9/23/97	6,9	9	839	51	**0.37**	**0.08**	2.50	MDA	**0.03**	**0.003**
654-97-0052	9/23/97	6,10	5	925	52	**0.60**	**0.08**	2.34	MDA	**0.03**	**0.002**
654-97-0053	9/23/97	6,11	3	765	53	**0.75**	**0.10**	2.62	MDA	**0.05**	**0.003**
654-97-0054	9/23/97	6,12	8	855	54	**0.80**	**0.12**	2.61	MDA	**0.04**	**0.003**
654-97-0055	9/23/97	6,13	9	764	55	**1.04**	**0.13**	**1.64**	**0.47**	**0.04**	**0.003**
654-97-0056	9/23/97	6,14	5	881	56	**0.72**	**0.09**	**1.41**	**0.36**	**0.03**	**0.002**
654-97-0057	9/23/97	6,15	2	871	57	**0.26**	**0.08**	2.37	MDA	**0.03**	**0.002**
654-97-0058	9/23/97	6,16	3	1042	58	**0.44**	**0.08**	1.98	MDA	**0.02**	**0.002**
654-97-0059	9/23/97	6,17	6	778	59	**0.60**	**0.11**	**2.88**	**0.43**	**0.04**	**0.003**
654-97-0060	9/23/97	6,18	1	784	60	**0.64**	**0.10**	2.78	MDA	**0.04**	**0.003**
654-97-0061	9/23/97	6,19	5	796	61	**0.50**	**0.07**	2.13	MDA	**0.02**	**0.002**
654-97-0062	9/23/97	6,20	2	741	62	**0.64**	**0.07**	2.51	MDA	**0.03**	**0.002**
654-97-0063	9/23/97	6,21	9	751	63	**0.43**	**0.07**	2.33	MDA	**0.01**	**0.002**
654-97-0064	9/24/97	6,22	3	885	64	**0.24**	**0.06**	2.08	MDA	**0.02**	**0.002**
654-97-0065	9/24/97	7,1	6	744	65	**1.11**	**0.10**	2.97	MDA	**0.06**	**0.003**
654-97-0066	9/24/97	7,2	9	688	66	**1.74**	**0.15**	1.82	MDA	**0.08**	**0.005**
654-97-0067	9/24/97	7,3	2	718	67	**1.09**	**0.11**	2.82	MDA	**0.05**	**0.003**
654-97-0068	9/24/97	7,4	8	774	68	**0.97**	**0.10**	2.47	MDA	**0.05**	**0.003**
654-97-0069	9/24/97	7,5	5	712	69	**0.77**	**0.09**	2.91	MDA	**0.05**	**0.004**
654-97-0070	9/24/97	7,6	9	771	70	**0.96**	**0.09**	**2.60**	**0.40**	**0.05**	**0.003**
654-97-0071	9/24/97	7,7	7	774	71	**0.85**	**0.12**	2.78	MDA	**0.05**	**0.003**
654-97-0072	9/24/97	7,8	4	773	72	**0.54**	**0.07**	2.67	MDA	**0.04**	**0.003**
654-97-0073	9/24/97	7,9	3	864	73	**0.86**	**0.10**	2.14	MDA	**0.04**	**0.003**
654-97-0074	9/24/97	7,10	1	874	74	**0.53**	**0.06**	2.36	MDA	**0.03**	**0.003**
654-97-0075	9/24/97	7,11	8	822	75	**0.63**	**0.09**	2.40	MDA	**0.04**	**0.004**
654-97-0076	9/24/97	7,12	4	813	76	**0.81**	**0.09**	2.54	MDA	**0.04**	**0.003**
654-97-0077	9/24/97	7,13	5	786	77	**0.70**	**0.07**	2.82	MDA	**0.03**	**0.003**
654-97-0078	9/24/97	7,14	9	762	78	**0.52**	**0.11**	2.62	MDA	**0.04**	**0.003**
654-97-0079	9/24/97	7,15	5	751	79	**0.78**	**0.09**	**1.66**	**0.35**	**0.05**	**0.004**
654-97-0080	9/24/97	7,16	2	800	80	**0.96**	**0.12**	2.58	MDA	**0.05**	**0.003**
654-97-0081	9/24/97	7,17	7	790	81	**0.68**	**0.08**	2.77	MDA	**0.05**	**0.003**
654-97-0082	9/24/97	7,18	3	822	82	**0.79**	**0.11**	2.68	MDA	**0.03**	**0.006**
654-97-0083	9/24/97	7,19	5	748	83	**0.92**	**0.10**	2.60	MDA	**0.05**	**0.003**
654-97-0084	9/24/97	7,20	4	767	84	**0.95**	**0.10**	2.69	MDA	**0.05**	**0.004**
654-97-0085	9/24/97	7,21	8	763	85	**0.49**	**0.11**	2.77	MDA	**0.04**	**0.003**
654-97-0086	9/24/97	7,23	4	789	86	**0.78**	**0.08**	2.66	MDA	**0.04**	**0.003**
654-97-0087	9/24/97	3,12	[illegible]	669	87	**0.76**	**0.10**	2.76	MDA	**0.05**	**0.003**
654-97-0088	9/24/97	3,13	[illegible]	641	88	**0.91**	**0.12**	3.12	MDA	**0.05**	**0.003**
654-97-0089	9/24/97	3,15	[illegible]	701	89	**1.21**	**0.11**	2.81	MDA	**0.05**	**0.003**
654-97-0090	9/24/97	8,10	[illegible]	677	90	**0.81**	**0.09**	2.79	MDA	**0.04**	**0.003**
654-97-0091	9/24/97	8,12	[illegible]	659	91	**0.91**	**0.14**	3.05	MDA	**0.04**	**0.003**
654-97-0092	9/24/97	8,14	[illegible]	661	92	**0.78**	**0.10**	2.99	MDA	**0.05**	**0.004**
654-97-0093	9/24/97	8,16	[illegible]	677	93	**0.54**	**0.10**	2.90	MDA	**0.05**	**0.004**
				Maximum		**1.74**		**2.88**		**0.08**	
			Detect	**Average**		**0.77**		**1.92**		**0.04**	
				Minimum		**0.24**		**1.40**		**0.01**	
				Detects		**93**		**13**		**93**	
				Maximum				3.12			
			MDA	Average				2.56			
				Minimum				1.82			
				NonDetect's		0		80		0	

Table 3. Teledyne-Brown Sr-90 Results

Sample #	Sr-90 pCi/g	Error pCi/g	Note
654-97-0006	0.26	± 0.28	MDA
654-97-0016	**0.77**	**± 0.32**	
654-97-0028	0.24	± 0.26	MDA
654-97-0044	**0.43**	**± 0.18**	
654-97-0049	**0.41**	**± 0.19**	
654-97-0069	**1.30**	**± 0.2**	
654-97-0070	**0.99**	**± 0.23**	
654-97-0071	**0.59**	**± 0.22**	
654-97-0077	0.40	± 0.31	MDA
654-97-0090	0.24	± 0.32	MDA
654-97-0091	**0.40**	**± 0.15**	
654-97-0093	0.29	± 0.23	MDA

Maximum	**1.30**
Average	**0.70**
Minimum	**0.40**
Detects	**7**

Max MDA	0.40
Average MDA	0.29
Min MDA	0.24
NonDetect's	**5**

Table 4. Surface Soil Sample Data

Sample Number	Date of Collection	Sample Description	Grid #	Sub-Grid #	Area Type	Weight grams	Sampled By	Analysis Type	
								Gamma	Sr-90
654-97-0001	22-Sep-97	Surface Soil Sample: 0" to 6" deep	1,2	8	Unaffected	712	McGinnis	X	
654-97-0002	22-Sep-97	Surface Soil Sample: 0" to 6" deep	2,1	5	Unaffected	759	McGinnis	X	
654-97-0003	22-Sep-97	Surface Soil Sample: 0" to 6" deep	2,3	3	Unaffected	715	McGinnis	X	
654-97-0004	22-Sep-97	Surface Soil Sample: 0" to 6" deep	2,5	7	Unaffected	789	McGinnis	X	
654-97-0005	22-Sep-97	Surface Soil Sample: 0" to 6" deep	2,22	4	Unaffected	755	McGinnis	X	
654-97-0006	22-Sep-97	Surface Soil Sample: 0" to 6" deep	3,2	5	Unaffected	733	McGinnis	X	X
654-97-0007	22-Sep-97	Surface Soil Sample: 0" to 6" deep	3,4	4	Unaffected	650	McGinnis	X	
654-97-0008	22-Sep-97	Surface Soil Sample: 0" to 6" deep	3,6	9	Unaffected	812	McGinnis	X	
654-97-0009	22-Sep-97	Surface Soil Sample: 0" to 6" deep	3,8	1	Unaffected	629	McGinnis	X	
654-97-0010	22-Sep-97	Surface Soil Sample: 0" to 6" deep	3,23	4	Unaffected	953	McGinnis	X	
654-97-0011	22-Sep-97	Surface Soil Sample: 0" to 6" deep	4,1	3	Unaffected	697	McGinnis	X	
654-97-0012	22-Sep-97	Surface Soil Sample: 0" to 6" deep	4,3	5	Unaffected	833	McGinnis	X	
654-97-0013	22-Sep-97	Surface Soil Sample: 0" to 6" deep	4,5	9	Unaffected	694	McGinnis	X	
654-97-0014	22-Sep-97	Surface Soil Sample: 0" to 6" deep	4,7	5	Unaffected	811	McGinnis	X	
654-97-0015	22-Sep-97	Surface Soil Sample: 0" to 6" deep	4,9	4	Unaffected	805	McGinnis	X	
654-97-0016	22-Sep-97	Surface Soil Sample: 0" to 6" deep	4,10	1	Affected	765	McGinnis	X	X
654-97-0017	22-Sep-97	Surface Soil Sample: 0" to 6" deep	4,11	6	Affected	810	McGinnis	X	
654-97-0018	23-Sep-97	Surface Soil Sample: 0" to 6" deep	4,12	9	Affected	814	McGinnis	X	
654-97-0019	23-Sep-97	Surface Soil Sample: 0" to 6" deep	4,13	2	Affected	809	McGinnis	X	
654-97-0020	23-Sep-97	Surface Soil Sample: 0" to 6" deep	4,14	3	Affected	843	McGinnis	X	
654-97-0021	23-Sep-97	Surface Soil Sample: 0" to 6" deep	4,15	4	Affected	890	McGinnis	X	
654-97-0022	23-Sep-97	Surface Soil Sample: 0" to 6" deep	4,16	8	Affected	819	McGinnis	X	
654-97-0023	23-Sep-97	Surface Soil Sample: 0" to 6" deep	4,17	6	Affected	788	McGinnis	X	
654-97-0024	23-Sep-97	Surface Soil Sample: 0" to 6" deep	4,18	7	Unaffected	784	McGinnis	X	
654-97-0025	23-Sep-97	Surface Soil Sample: 0" to 6" deep	4,20	5	Unaffected	939	McGinnis	X	
654-97-0026	23-Sep-97	Surface Soil Sample: 0" to 6" deep	4,22	1	Unaffected	988	McGinnis	X	
654-97-0027	23-Sep-97	Surface Soil Sample: 0" to 6" deep	5,2	3	Unaffected	824	McGinnis	X	
654-97-0028	23-Sep-97	Surface Soil Sample: 0" to 6" deep	5,4	9	Unaffected	785	McGinnis	X	X
654-97-0029	23-Sep-97	Surface Soil Sample: 0" to 6" deep	5,6	7	Unaffected	809	McGinnis	X	
654-97-0030	23-Sep-97	Surface Soil Sample: 0" to 6" deep	5,8	4	Affected	848	McGinnis	X	
654-97-0031	23-Sep-97	Surface Soil Sample: 0" to 6" deep	5,9	3	Affected	769	McGinnis	X	
654-97-0032	23-Sep-97	Surface Soil Sample: 0" to 6" deep	5,10	1	Affected	726	McGinnis	X	
654-97-0033	23-Sep-97	Surface Soil Sample: 0" to 6" deep	5,11	8	Affected	803	McGinnis	X	
654-97-0034	23-Sep-97	Surface Soil Sample: 0" to 6" deep	5,12	2	Affected	861	McGinnis	X	
654-97-0035	23-Sep-97	Surface Soil Sample: 0" to 6" deep	5,13	7	Affected	885	McGinnis	X	
654-97-0036	23-Sep-97	Surface Soil Sample: 0" to 6" deep	5,14	4	Affected	804	McGinnis	X	
654-97-0037	23-Sep-97	Surface Soil Sample: 0" to 6" deep	5,15	2	Affected	821	McGinnis	X	
654-97-0038	23-Sep-97	Surface Soil Sample: 0" to 6" deep	5,16	6	Affected	715	McGinnis	X	
654-97-0039	23-Sep-97	Surface Soil Sample: 0" to 6" deep	5,17	3	Affected	891	McGinnis	X	
654-97-0040	23-Sep-97	Surface Soil Sample: 0" to 6" deep	5,19	7	Unaffected	820	McGinnis	X	
654-97-0041	23-Sep-97	Surface Soil Sample: 0" to 6" deep	5,21	1	Unaffected	853	McGinnis	X	
654-97-0042	23-Sep-97	Surface Soil Sample: 0" to 6" deep	5,23	7	Unaffected	904	McGinnis	X	
654-97-0043	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,1	1	Affected	820	McGinnis	X	
654-97-0044	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,2	4	Affected	756	McGinnis	X	X
654-97-0045	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,3	8	Affected	909	McGinnis	X	
654-97-0046	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,4	9	Affected	993	McGinnis	X	
654-97-0047	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,5	9	Affected	955	McGinnis	X	
654-97-0048	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,6	4	Affected	848	McGinnis	X	
654-97-0049	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,7	2	Affected	713	McGinnis	X	X
654-97-0050	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,8	8	Affected	842	McGinnis	X	
654-97-0051	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,9	9	Affected	839	McGinnis	X	
654-97-0052	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,10	5	Affected	925	McGinnis	X	
654-97-0053	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,11	3	Affected	765	McGinnis	X	
654-97-0054	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,12	8	Affected	855	McGinnis	X	
654-97-0055	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,13	9	Affected	764	McGinnis	X	
654-97-0056	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,14	5	Affected	881	McGinnis	X	
654-97-0057	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,15	2	Affected	871	McGinnis	X	
654-97-0058	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,16	3	Affected	1042	McGinnis	X	
654-97-0059	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,17	6	Affected	778	McGinnis	X	
654-97-0060	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,18	1	Affected	784	McGinnis	X	
654-97-0061	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,19	5	Affected	796	McGinnis	X	
654-97-0062	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,20	2	Affected	741	McGinnis	X	
654-97-0063	23-Sep-97	Surface Soil Sample: 0" to 6" deep	6,21	9	Affected	751	McGinnis	X	
654-97-0064	24-Sep-97	Surface Soil Sample: 0" to 6" deep	6,22	3	Unaffected	885	McGinnis	X	

Table 4 (Continued). Surface Soil Sample Data

Sample Number	Date of Collection	Sample Description	Grid #	Sub-Grid #	Area Type	Weight grams	Sampled By	Analysis Type	
								Gamma	Sr-90
654-97-0065	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,1	6	Affected	744	McGinnis	X	
654-97-0066	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,2	9	Affected	688	McGinnis	X	
654-97-0067	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,3	2	Affected	718	McGinnis	X	
654-97-0068	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,4	8	Affected	774	McGinnis	X	
654-97-0069	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,5	5	Affected	712	McGinnis	X	X
654-97-0070	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,6	9	Affected	771	McGinnis	X	X
654-97-0071	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,7	7	Affected	774	McGinnis	X	X
654-97-0072	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,8	4	Affected	773	McGinnis	X	
654-97-0073	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,9	3	Affected	864	McGinnis	X	
654-97-0074	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,10	1	Affected	874	McGinnis	X	
654-97-0075	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,11	8	Affected	822	McGinnis	X	
654-97-0076	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,12	4	Affected	813	McGinnis	X	
654-97-0077	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,13	5	Affected	786	McGinnis	X	X
654-97-0078	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,14	9	Affected	762	McGinnis	X	
654-97-0079	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,15	5	Affected	751	McGinnis	X	
654-97-0080	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,16	2	Affected	800	McGinnis	X	
654-97-0081	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,17	7	Affected	790	McGinnis	X	
654-97-0082	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,18	3	Affected	822	McGinnis	X	
654-97-0083	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,19	5	Affected	748	McGinnis	X	
654-97-0084	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,20	4	Affected	767	McGinnis	X	
654-97-0085	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,21	8	Affected	763	McGinnis	X	
654-97-0086	24-Sep-97	Surface Soil Sample: 0" to 6" deep	7,23	4	Unaffected	789	McGinnis	X	
654-97-0087	24-Sep-97	Surface Soil Sample: 0" to 6" deep	3,12	Backhoe disturbance	Unaffected	669	McGinnis	X	
654-97-0088	24-Sep-97	Surface Soil Sample: 0" to 6" deep	3,13	Backhoe disturbance	Unaffected	641	McGinnis	X	
654-97-0089	24-Sep-97	Surface Soil Sample: 0" to 6" deep	3,15	Backhoe disturbance	Unaffected	701	McGinnis	X	
654-97-0090	24-Sep-97	Surface Soil Sample: 0" to 6" deep	8,10	Backhoe disturbance	Affected	677	McGinnis	X	X
654-97-0091	24-Sep-97	Surface Soil Sample: 0" to 6" deep	8,12	Backhoe disturbance	Affected	659	McGinnis	X	X
654-97-0092	24-Sep-97	Surface Soil Sample: 0" to 6" deep	8,14	Backhoe disturbance	Affected	661	McGinnis	X	
654-97-0093	24-Sep-97	Surface Soil Sample: 0" to 6" deep	8,16	Backhoe disturbance	Affected	677	McGinnis	X	X